

PARTS AND SERVICE MANUAL



SKI-DADDLER

SNOWMOBILES

MARK IV [SD15P10A]

MARK V [SD18E20A]

1969-1970



WESTERN TOOL DIVISION
Des Moines, Iowa 50302
AMF INCORPORATED

PART NO. 37851
REVISED and REPRINTED
JUNE 1970

WARRANTY SERVICE

Warranty service policy is printed below and on the warranty registration card included with the unit. The registration card must be filled in and mailed to the manufacturer. The card is postage paid. Warranty service will be handled by all authorized AMF Ski-Daddler dealers.



Your Manual No. _____ is a registered number. Additional parts and service information will automatically be sent to you.

WARRANTY CERTIFICATE AMF SKI-DADDLER SNOWMOBILE

AMF WESTERN TOOL DIVISION warrants this vehicle to the first retail purchaser to be free from defects in material and workmanship for a period of ninety days from its first operation (thirty day limit on commercial use and thirty day limit on rental service). This shall be limited to replacing free of charge, F.O.B., Des Moines, Iowa, any defective part provided that:

1. Vehicle has not been subject to accident or misuse.
2. No repairs or alterations have been made outside of our factory or factory approved service station in any respect which in our judgment affects its condition or operation.
3. Defective parts must be returned by authorized dealer within 30 days after failure.
4. That our examination of the part has disclosed to our satisfaction the defect.
5. Warranty does not apply, if the vehicle in question has been used by an authorized dealer or any other person prior to the original retail sale.

This warranty does not cover normal wear or apply if the sled has been subject to misuse, competition racing, negligence, accident, or submersion under water, or operated on any surface other than snow or ice.

AMF WESTERN TOOL DIVISION shall not be responsible for damage in transit or handling by any common contract carrier.

Under no circumstances, within or without the warranty period, will the Company be liable for damages, for loss of use, or damages resulting from delay or any consequential damages.

This warranty is in lieu of all other warranties expressed or implied, and all other obligations or liabilities on the part of AMF WESTERN TOOL DIVISION. The Company reserves the right to incorporate changes in design into this product without obligation to make these changes on units previously sold.

IMPORTANT

While the warranty covers defects in material and workmanship, certain maintenance items as listed below are considered normal operating expense items and are not covered under the warranty.

- | | |
|---|---|
| 1. Engine tune-up cleaning or replacement of spark plugs. | clutch or traction belt damage due to running engine at high RPM on kickstand, or with variable speed belt removed. |
| 2. Ski Alignment. | 7. Broken windshields. |
| 3. Brake, variable speed, or traction belt adjustment, or variable speed belt replacement. | 8. Any modifications other than factory recommendations. |
| 4. Brake lining or ski wear rod replacement. | 9. Use of sled for competition racing will void warranty. |
| 5. Paint, body dents, damaged fiberglass, and chrome or trim damage due to use. | 10. Traction belt failure due to misalignment or abuse. |
| 6. Engine damage due to lack of sufficient oil in fuel mixture, incorrect oil, too lean carburetor adjustment, or | |

Include the complete (8 digit) model number as shown on Model Plate when ordering parts or asking for information. Due to slight engineering changes, this is for identification purposes only.

GUARANTEE FLAT-RATE LABOR SCHEDULE

Models

MARK IV (SD15P10A)

MARK V (SD18E20A)

1. Remove and replace chain case cover	1/4 hour
2. Remove and replace chain and adjust tension	1/4 hour
3. Remove and replace driven clutch or bearings or V-belt	1/2 hour
4. Remove and replace drive clutch	1/2 hour
5. Remove and replace engine mount and/or strap	1 hour (Mk IV)
Remove and replace engine mount and/or strap	2 hours (Mk V)
6. Remove and replace drive sprockets, drive shaft or bearings	1 hour
7. Remove and replace traction belt (endless) and adjust	2 hours
8. Remove and replace rear idler shaft assembly or bearings	1/2 hour
9. Remove and replace rear support arms (2)	1/2 hour
10. Remove and replace throttle cable	1/4 hour
11. Remove and replace brake cable	1/4 hour
12. Remove and replace bogie support half (1 or both)	1/2 hour
13. Remove and replace bogie wheel	1/4 hour
14. Remove and replace steering spindle	1/4 hour
15. Remove and replace spindle arm	1/4 hour
16. Remove and replace carburetor	3/4 hour

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INTRODUCTION

This manual has been prepared to provide all authorized AMF Ski-Daddler Dealers, Distributors and technicians with the instructions necessary to service and maintain the 1970 AMF MARK IV (SD15P10A) and MARK V (SD18E20A) Ski-Daddler snowmobiles.

This manual is presented in two sections. The first section, Maintenance, provides the instructions necessary for maintenance and service while the second section, the Illustrated Parts List is provided to facilitate the ordering of spare and replacement parts.

If the information in this manual is not applicable to the Mark IV and Mark V models, the exceptions will be noted and the correct information for the particular model will be given.

PREDELIVERY INSTRUCTIONS

The 1970 Ski-Daddlers are shipped completely assembled except for the windshield assembly, the ski assembly and on the electric-start models, the battery assembly.

These assemblies, plus the attaching hardware will be found in the shipping carton. Carefully open the carton and immediately inspect the equipment for any damage or missing items.

IMPORTANT: The owner must retain the Ski-Daddler Inspection Record, Form No. 4477QA. This form must be shown to the dealer should any claim arise under the AMF Guarantee.

Install Ski Assembly

- Remove the locknut and screw at the spring mounting bracket (figure 1).

- Place the spindle pad in the spring mounting bracket with the thicker section and the directional arrow on the pad pointing forward. **NOTE:** The plastic bag containing the spindle pad will be found in the storage compartment.

- Install the ski assembly by securing the spring mounting bracket and spindle pad to lower end of spindle tube assembly as shown in figure 1. Apply 30 foot-pounds torque to the locknut. Do not over-tighten bolt as the ski assembly should float freely on the spindle.

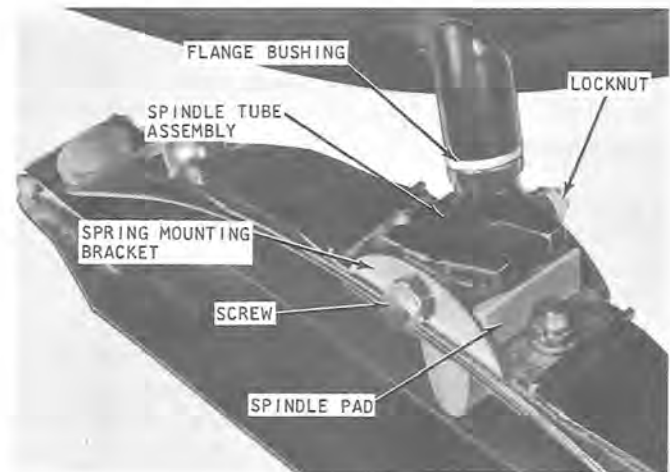


Figure 1

- Repeat Install Ski Assembly procedures for opposite ski.

NOTE: Properly installed skis should toe out 0- to 1/2-inch at the front end (see figure 2) and should be symmetrical about the centerline of the sled. If alignment is necessary, refer to the Steering and Ski Alignment procedures.



Figure 2

Install Windshield Assembly

- Remove the screws securing the left- and right-hand mounting strips to the hood. Remove the mounting strips.

- Remove the protective plastic cover from the windshield. Place the windshield in position on the hood assembly. Replace the mounting strips as shown in figure 2.

- Using the original screws, loosely secure the mounting strips and windshield to the hood assembly starting at the center and working to the sides.

- Engage the ends of the mounting strips in the trim strip on the windshield and then tighten the screws, again starting at the center and working to the sides. **NOTE:** Check mounting strips for sharp edges or corners. Use a fine tooth file to smooth all edges and corners.

Activate Battery—Mark V Only

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Before activating the 12-volt storage battery, disconnect the battery cables and remove the battery. Activate the battery in accordance with the instructions contained in the battery package. Reinstall the battery as follows:

- Place 12-volt battery on the battery support plate with positive (+) terminal post forward (see figure 3).

- Attach the positive (+) battery cable and the RED wire lead (from cigarette lighter) to the positive terminal post.

- Attach the negative (-) battery cable and the BLACK wire lead (from cigarette lighter) to the negative terminal post.

- Position the holddown strap across the battery and over the holddown rods. Secure the strap and battery using locknuts and washers. Do not over-tighten.

- Replace the hood and headlight assembly.

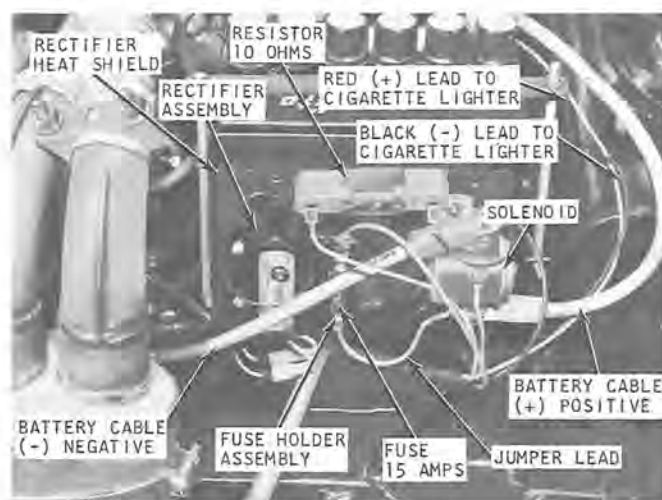


Figure 3—Mark V Only

Fuel Mixture Instructions

WARNING

Never fill the gasoline tank while the engine is hot. Wipe off any spilled gasoline before attempting to start engine.

The correct oil-to-gasoline ratio is 20:1 (20 parts regular gasoline to 1 part oil). Too much oil will cause carbon deposits. Too little oil or a poor mix will cause insufficient lubrication and possible engine damage.

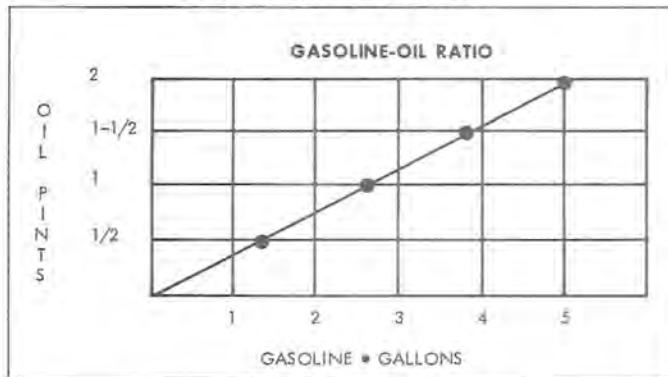
IMPORTANT: Gasoline and oil should be mixed at temperatures above zero. At temperatures below zero, gas and oil mix with difficulty.

Fuels containing additives are not recommended for use in Ski-Daddler engines. For mixing with gasoline, use only oil that is recommended for use in air-cooled, 2-cycle engines such as an AMF oil or an equivalent good grade of SAE 30 or 40 non-detergent motor oil.

IMPORTANT: Some outboard motor oils contain a detergent that works well in outboard motors that operate at much lower temperatures because they are water cooled. However, the detergents may cause spark plug fouling in the air-cooled engines used on your Ski-Daddler.

Use a mixture of gasoline and oil as shown in the Fuel Mixture Chart. Never use gasoline left over from the summer or previous winter.

FUEL MIXTURE CHART



Mix the gasoline and oil thoroughly in a clean container kept for this purpose only. The best way to ensure a good mix is to pour the oil into the empty container and then add a small amount of gasoline and mix thoroughly. Then add additional amounts of gasoline as shown on the Fuel Mixture Chart. Fill Ski-Daddler gas tank from this separate container of mixed fuel. Use a funnel with a fine-screen strainer when filling the tank. The gas cap is located under the gas lid and hinge assembly.

Lubrication

Refer to the lubrication chart for lubrication of grease fittings, type of lubricant and frequency.

SERVICE AND REPAIR

Hood Removal and Installation

- To remove the hood and headlight assembly, disconnect the hood and the sled wiring harness at the quick-disconnect below the console on the right-hand side of the sled. Release the hood latch

assemblies and then remove the hood and headlight assembly by lifting rear section first.

- To install the hood and headlight assembly, place the hood in position on the sled so that the forward hood clip and the bottom edge of the hood engages the clips along the inside edge of the bumper strip.

- Engage the left- and right-hand latch assemblies to secure the hood to the main frame.

- Connect the sled wiring harness to the hood wiring harness at the quick-disconnect below the console on the right-hand side of the sled.

Hood Assembly Repair

AMF Fiberglass Repair Kits are available through your authorized AMF Distributor. For large repairs, order AMF Fiberglass Repair Kit No. 1510693. Smaller repairs can be made with Repair Kit No. 1510765. Paint all repaired areas on the hood using AMF-Orange color paint available in easy-to-use spray container, AMF Part No. 1510828. Follow the instructions in the kit when making repairs.

Replace Lamp Assemblies

Headlight. To replace the headlight lamp assembly, simply raise the headlight assembly, remove the screws securing the cover assembly and remove the cover assembly. Remove the defective headlight and replace with new lamp assembly. See illustrated parts list.

LUBRICATION CHART

PART	LOCATION	TYPE OF LUBRICATION	FREQUENCY
STEERING SPINDLES	GREASE ZERK FITTINGS ON SPINDLE HOUSINGS	LOW-TEMPERATURE GREASE	20 HOURS
DRIVE CHAIN	CHAINCASE HOUSING	NO. 2 LITHIUM BEARING GREASE	20 HOURS
BOGIE WHEELS	GREASE ZERK FITTING IN CENTER OF BOGIE WHEEL	LOW-TEMPERATURE GREASE	20 HOURS
SPROCKET BEARINGS	REAR SPROCKETS	NO. 2 LITHIUM BEARING GREASE	40 HOURS
STEERING COLUMN	U-STRAP AND WEARPLATES AT ROLL BAR	NO. 2 LITHIUM BEARING GREASE	AS REQUIRED

Taillight. Remove taillight lens and cover, or lift the seat assembly to expose the rear console assembly containing the twin taillight bulbs. Remove the defective bulb and replace with a new bulb. See illustrated parts list.

Steering and Ski Assembly Alignment

Good steering ability requires that the skis be properly set and aligned with the sled body when the steering handle is placed in the straight-ahead position. To determine that the skis are properly aligned, measure the distance between the inside edges of the skis at the front end and at the rear. Properly aligned skis should toe out 0- to 1/2-inch maximum at the front. Therefore, the overall measurement at the front end of the skis should be 1/2 inch greater than at the rear. If the skis or steering mechanism are not properly set, adjust as follows.

- Place steering handle in a straight-ahead position.

- Remove the hood assembly.

- Remove the bolt (1, figure 4), two spacers (2), bottom spacer and locknut securing the rod end bearing (3) to the spindle arm.

- Loosen the jam nuts (4) securing both rod end bearings (3) to the tie rod (5).

NOTE: If both skis need adjustment, repeat procedure for the opposite ski.

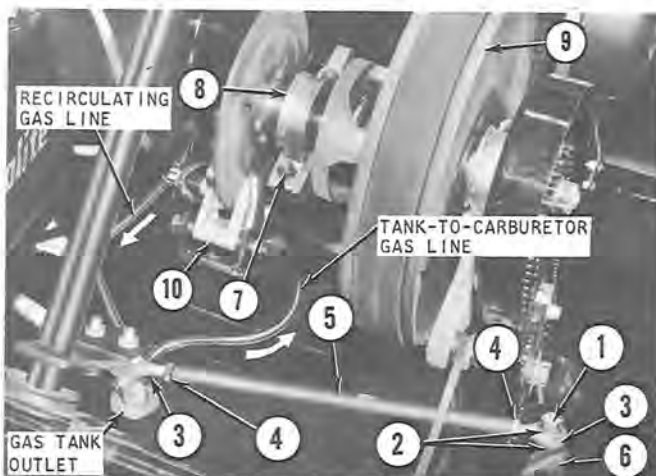


Figure 4

- Move the affected ski into proper alignment and recheck measuring points to insure that the skis toe out 0- to 1/2-inch maximum at the front end and are in the same orientation with the sled body as shown in figure 2.

- With skis properly set and steering handle in the straight-ahead position, rotate tie rod (5, figure 4) as required to bring rod end bearing (3) in line with the spindle arm (6).

- Secure rod end bearing (3) to spindle arm (6) as illustrated. Check for proper alignment and then tighten jam nuts (4) to secure both rod end bearings.

NOTE: If a greater adjustment is required than that permitted by the steering linkage assembly, it will be necessary to align the ski by making the adjustment at the spindle tube assembly as follows:

- Remove screw (5, figure 5), washers and locknut (6) securing spindle tube assembly (7) to spindle arm (8).

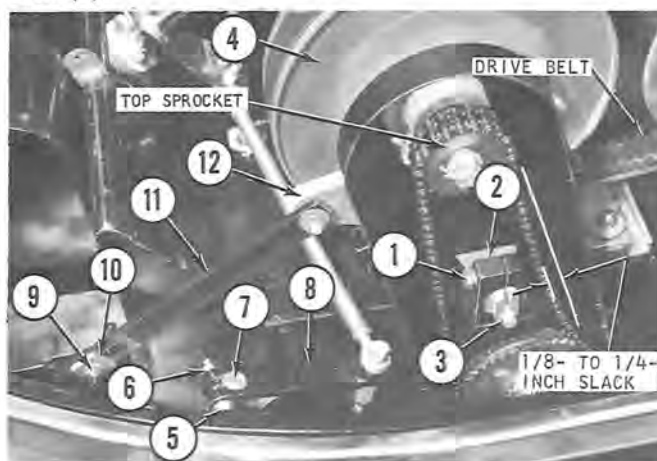


Figure 5

- Remove spindle arm (8) and rotate ski and spindle tube one notch in the required direction; replace and secure spindle arm to the spindle tube. Apply 20 foot-pounds torque to the locknut (6).

- Recheck the skis for proper toe out and alignment as previously described.

To Remove Drive Chain

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect spark plug wires before working on the engine or drive elements.

- Release the chain cover straps and remove the chain cover top.

- Loosen the bolts (1, figure 5) on both cam up-rights (2) and rotate the cam and shaft (3) as required to loosen the chain tension. During reassembly, apply 30 foot-pounds torque to the bolt (1).

- Remove the cotter pin, slotted nut and washer securing the top sprocket to the driven clutch shaft. Remove the top sprocket and chain together. During reassembly, add No. 2 Lithium bearing grease to the chain case.

- Reassembly is the reverse of removal. Perform drive chain adjustment procedures.

Drive Chain Adjustment

A properly adjusted drive chain (figure 5) should have a 1/8- to 1/4-inch slack. Check and adjust chain as follows:

- Release the chain cover straps and remove the chain cover.

- Check chain for proper slack. If adjustment is required, loosen the screws (1) securing the cam blocks (2) on each side.

- Rotate the cam (3) counterclockwise to tighten or until the chain is properly tensioned. Hold the cam in this position while tightening the cam block screws (1) on each side. Be certain the lateral alignment between the drive clutch and the driven clutch (4) is maintained while the cam block screws are tightened.

- Recheck chain tension before replacing the chain case cover.

To Remove Variable-Speed Drive Belt

- Remove the drive chain. Refer to paragraph To Remove Drive Chain.

- Remove the clutch guard assembly.

- Loosen the locknut (9, figure 5) and serrated washer (10) securing the clutch rod tensioner (11)

to the main frame. During reassembly, apply 10 foot-pounds torque to the locknut (9).

- Push the driven clutch toward the drive clutch sufficiently to allow removal of the variable-speed drive belt from the drive clutch.

- Remove the locknuts (7, figure 4) and washers securing the bearing clamps (8) and remove the bearing clamps. During reassembly, apply 5 foot-pounds torque to the locknuts (7).

- Lift the driven clutch (9) and drive belt clear of the brake assembly (10) and away from the chain case.

- Remove the variable-speed drive belt.

NOTE: Variable-speed drive belt installation procedures are the reverse of removal except that the belt must first be placed around the driven clutch and then around the drive clutch. After installation, perform the drive chain adjustment, variable-speed belt adjustment and the drive clutch alignment procedures.

Variable-Speed Drive Belt Adjustment

Proper tension for a new drive belt should be obtained when the clutch centers are set approximately 10-3/4 inches apart (see figure 6). Proper tension for a drive belt that has been used is obtained when opposite sides of the belt can be squeezed, between the drive clutches to the following dimensions:

Mark IV 2-3/4 to 3-1/4 inches

Mark V 4 to 4-1/2 inches

The measurement must be taken between the top and bottom outside surfaces of the belt and as close to the drive clutch flanges as possible. Be certain the driven clutch does not open when belt is squeezed.

IMPORTANT: Do not use antislip belt dressing. Use of belt dressing will void the owner's guarantee as belt slippage is a safety feature which prevents overstressing the drive-system components.

- To adjust drive belt tension, loosen the locknut (9, figure 5) securing the clutch rod tensioner to the main frame assembly.

NOTE: If the drive belt is wearing unevenly, check drive belt alignment as described in Drive Clutch Alignment procedures.

- Move the driven clutch (4) in the direction required to obtain proper belt tension. Hold this position while tightening the locknut (9) to secure the clutch rod tensioner. Be certain the washer (10) and bar serrations are properly engaged. Apply 10 foot-pounds torque to the locknut (9).

To Remove Drive Clutch

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect spark plug wires before working on the engine or drive elements.

- Remove the clutch guard assembly.
- Loosen the locknut (9, figure 5) and serrated washer (10) securing the clutch rod tensioner (11) to the main frame. During reassembly, apply 10 foot-pounds torque to the locknut (9).
- Push the driven clutch toward the drive clutch sufficiently to allow removal of the variable-speed drive belt from the drive clutch.
- To remove the Mark IV drive clutch, remove the clutch adapter bolt and washer securing the drive clutch, if necessary use a clutch puller. During reassembly, apply 70 foot-pounds torque to the clutch adapter bolt.

NOTE: To remove the Mark V drive clutch, flatten the tangs on the lock plate and remove the clutch bolt, lock plate, Belleville washer and the retaining washer. During reassembly, apply 70 foot-pounds torque to the clutch bolt.

- Reassembly is the reverse of removal. Perform variable-speed drive belt adjustment and drive clutch alignment procedures.

Drive Clutch Alignment

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect spark plug wires before working on the engine or drive elements.

- Remove the clutch guard.

- Loosen the engine holddown nuts securing the engine supports to the engine mount straps as illustrated in figure 6.

- Place a straightedge on the fixed face of the drive clutch and move the engine until the offset between the straightedge and the front and rear edges of the driven clutch is as shown in figure 6. Rotate driven clutch 90-degrees and repeat procedure.

- Tighten engine holddown nuts and recheck alignment. Apply 25 foot-pounds torque when tightening the engine holddown nuts.

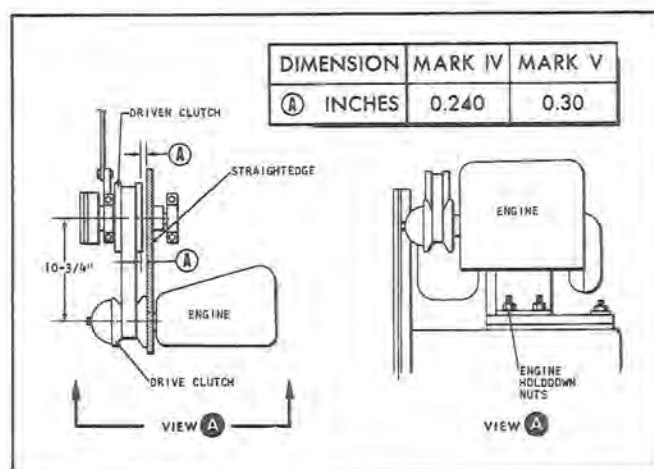


Figure 6

To Remove Driven Clutch

NOTE: The procedures required to remove the driven clutch are the same as those described in paragraph To Remove Variable-Speed Drive Belt.

To Remove Brake Assembly

- Remove hood and headlight assembly. Refer to Hood Removal and Installation

CAUTION

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Disconnect brake cable at brake mounting bracket and at brake actuating lever.

- Remove the two bolts and locknuts securing the mounting bracket to the driven clutch mounting.

- Remove the brake assembly.

- Installation procedures are the reverse of removal. Refer to Brake Adjustment procedures.

Brake Adjustment

- To adjust the brake pads (5, figure 7) to the disk (1), remove the cotter pin (2) and tighten or loosen the castle nut (4) as required to permit the brake pads (5) to just clear the brake disk. Reinstall the cotter pin. To adjust for excessive play in brake cable or lever position, loosen jam nuts (6) and move brake housing (7) as required. Tighten jam nuts.

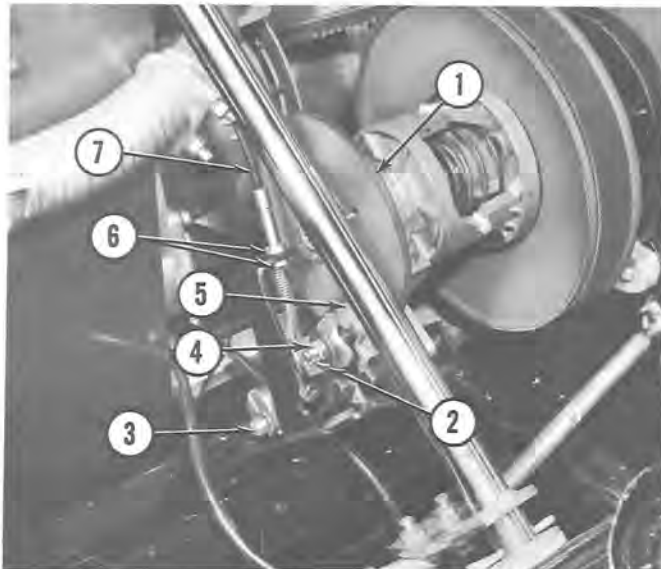


Figure 7

To Remove Carburetor

To gain access to the carburetor, remove the console door assembly by turning the door fastener counterclockwise to release the door lock.

- Loosen throttle- and choke-control cable adjustment screws and release both cables at carburetor (see figure 8). Do not misplace throttle-wire reinforcement.

- Remove the three screws securing the air intake filter (figure 10) and choke control bracket mounted on the Mark IV carburetor only.

- Release the throttle extension spring and hook at the carburetor throttle control lever.

- Release the hose clamp and disconnect the impulse line at the carburetor. Wipe up any spilled gasoline immediately.

- Release the tank-to-carburetor gas line (figure 10). Wipe up any spilled gasoline immediately.

- Release the carburetor-to-tank recirculating gas line at the recirculation elbow. **IMPORTANT:** Be certain to note the position of the gas lines to insure proper reassembly. Wipe up any spilled gasoline immediately.

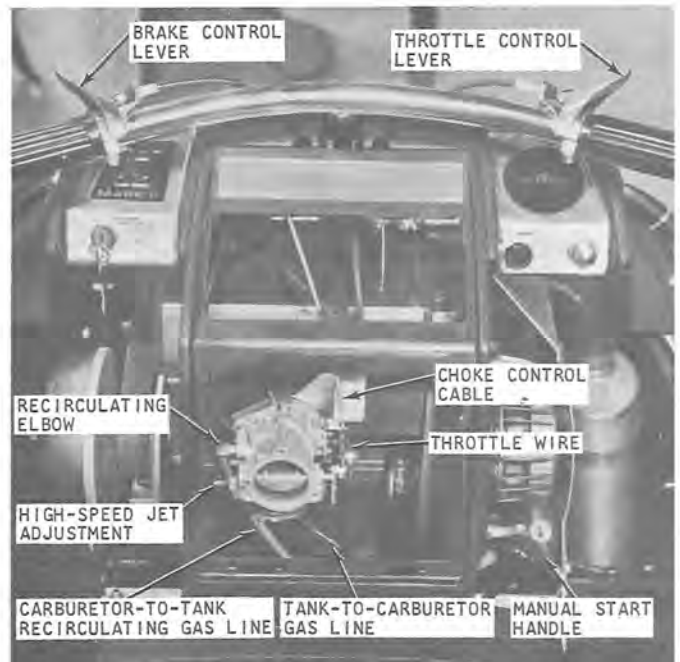


Figure 8 —Mark V Only

- Remove the metric nuts securing the carburetor to the intake manifold and remove the carburetor.

NOTE: Do not damage gaskets when removing carburetor. When replacing carburetor on the Mark V sleds, do not remove the throttle bracket unless it is necessary due to a damaged bracket or when replacing the gaskets.

- Installation is the reverse of removal. Adjust carburetor as described in Carburetor Adjustment procedures.

Carburetor Adjustment

The carburetor used on the Mark IV and Mark V Ski-Daddlers is a Tillotson Model HD carburetor equipped with a recirculation system for better sled performance. **NOTE:** Never run engine with the

carburetor-to-tank recirculating gas line disconnected.

When adjusting the carburetor, best results will be obtained if the adjustments are made on a warm engine. During carburetor adjustments, **DO NOT FORCE ADJUSTMENT SCREWS INTO SEATS.**

NOTE: To gain access to the carburetor adjustments, remove the console door assembly by turning the door fastener counterclockwise to release.

● **TO ADJUST CARBURETOR** – Close the high-speed jet shown in figure 8 (**DO NOT FORCE**). Then open as shown in the carburetor adjustment chart, figure 9.

SKI-DADDLER MODEL	CARBURETOR	CARBURETOR ADJUSTMENT	
		LOW-SPEED JET (TURNS)	HIGH-SPEED JET (TURNS)
MK-IV	Tillotson HD 39A (AMF No. 37258)	$1-1/8 + 1/8$ - 0 Open	$3/4 + 1/8$ - 0 Open
MK-V	Tillotson HD 39A (AMF No. 37258)	$1-1/8 + 1/8$ - 0 Open	$1 + 1/8$ - 0 Open

Figure 9

● Turn the low speed jet (idle-mixture screw) shown in figure 10 all the way in (**DO NOT FORCE**), then open as shown in figure 9 for the particular model sled. This adjustment controls the mixture at idling speeds. A lean idle mixture will result in poor acceleration.

Keep the idle speed slower than the clutch engaging speed by adjusting the idle-speed screw. **NOTE:** Do not use the low-speed jet to adjust for idle speed.

NOTE: Figure 10 shows a throttle-wire adjustment screw. If the throttle plate fails to open completely when the throttle control lever is depressed, loosen the throttle-wire adjustment screw and readjust the wire as required to open the throttle.

To Remove Starting Motor Assembly—Mark V Only

● Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect spark plug wire before working on the engine or drive elements.

● Disconnect the battery-to-solenoid positive (+) cable at the battery to prevent sparking and possible shorting.

● Disconnect the solenoid-to-starting motor cable at the starting motor.

● Back off the upper nut securing the battery-to-starting motor negative (-) ground cable.

● Back off the two nuts securing the starting motor assembly to the engine. Remove the ground wire from the engine wiring harness and the battery-to-starting motor ground wire attached to the upper stud and remove the starting motor assembly.

● Reassembly is the reverse of removal.

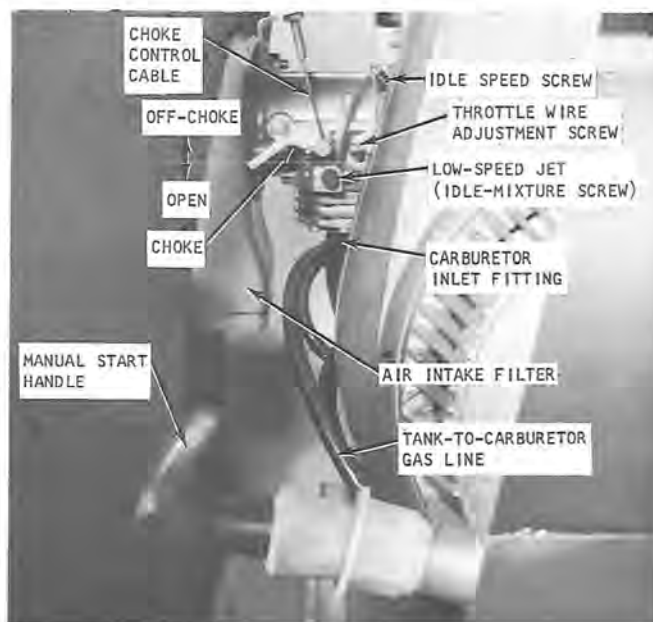


Figure 10

To Remove Engine and Support Assembly—Mark IV Only

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Remove the console door assembly by turning the door fastener counterclockwise to release.
- Remove the six screws, washers and locknuts securing the console tongue assembly to the tool box and to the mini-console (see figure 11).
- Remove the drive clutch. Refer to paragraph To Remove Drive Clutch.
- Loosen the flexible tube clamps securing the muffler exhaust tube to the engine exhaust manifold and release the exhaust tubes.

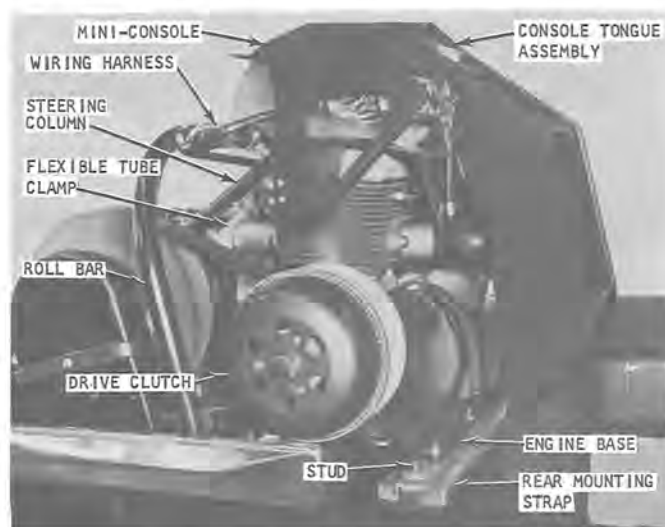


Figure 11

- Disconnect the throttle and choke control cables and remove the carburetor as described in paragraph To Remove Carburetor.
- Disconnect the yellow wire lead and the black wire lead at the engine and the black ground wire lead at the starter cover. Replace the metric nut to secure the cover after removing the black wire lead.

- Remove the heat shield located between the engine and the muffler. Remove the attaching hardware at the muffler bracket, heat shield bracket and at the top near the steering column.

- Remove the locknuts and washers securing the engine mounting straps to the main frame.

- Lift the engine until the engine mounting straps clear the studs shown in figure 11. Rotate the engine counterclockwise and remove the engine toward the rear and clear of the sled.

- Remove the carriage bolts, washers and locknuts securing the mounting straps to the engine base. Remove the mounting straps and bar washers. NOTE: During reassembly, the mounting straps and bar washer must be secured to the engine base before installing the replacement engine.

- Installation procedures are the reverse of removal.

To Remove Engine and Support Assembly—Mark V Only

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Remove the console door assembly by turning the door fastener counterclockwise to release.

- Remove the six screws, washers and locknuts securing the console tongue assembly to the tool box and to the mini-console (see figure 11).

- Remove the drive clutch. Refer to paragraph To Remove Drive Clutch.

- Loosen the flexible tube clamps securing the muffler exhaust tube to the engine exhaust manifold and release the exhaust tubes.

- Disconnect the throttle and choke control cables and remove the carburetor as described in paragraph To Remove Carburetor.

- Remove the starting motor assembly. Refer to paragraph To Remove Starting Motor Assembly.

- Remove the heat shield located between the engine and the muffler. Remove the attaching hardware at the muffler bracket, heat shield bracket and at the top near the steering column.

- Remove the bolts (10, figure 12), spacers and nuts securing the steering linkage to the steering column arm (9). During reassembly, apply 15 foot-pounds torque to the nuts securing the steering linkage.

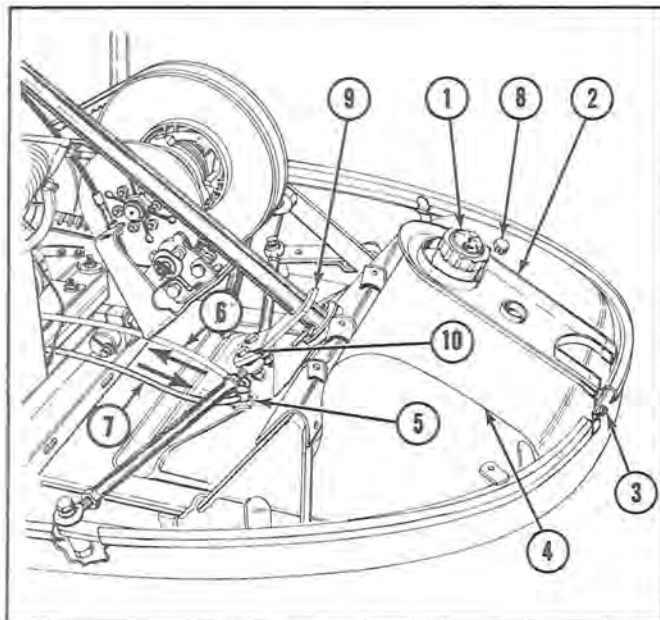


Figure 12

- Remove the bottom cotter pin securing the steering column to the main frame steering column support.

- Disconnect the wiring harness at the battery, electrical panel, rear console and engine. Release the wire V-clips in the tool box and at the foot rest and remove the wiring harness.

- Remove the two screws, formed washers and locknuts at each end of the roll bar and remove the roll bar, steering column and mini-console as a unit.

- Remove the locknuts and washers securing the engine mounting straps to the main frame studs, and remove the engine, engine base and mounting straps.

- Remove the carriage bolts, nuts and washers securing the engine mounting straps to the engine base. Remove the straps for reassembly. During

reassembly, apply 25 foot-pounds torque to the nuts securing the engine base.

- Installation is the reverse of removal.

To Remove Gas Tank

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect spark plug wires before working on the engine or drive elements.

- Check gas cap and indicator assembly to be certain tank is empty, or nearly empty.

- Remove the gas cap and indicator assembly (1, figure 12).

- Remove the bolts (3) and washers securing the gas spill chute (2) to the main frame and remove the gas spill chute.

- Disconnect the tank-to-carburetor gas line (6) and the recirculating gas line (7) at the gas tank outlet fitting (5). Wipe up any spilled gasoline immediately.

- Remove the gas tank (4) by carefully sliding the tank up and away from the main frame. **IMPORTANT:** Do not damage the gas tank outlet (5) when removing the tank.

CAUTION

Do not attempt to make any repairs to the gas tank. Use extreme care when removing the gas tank. Do not remove tank near flame or open fire.

- Gas tank installation procedures are the reverse of removal. **NOTE:** If the original tank is not to be installed, it will be necessary to remove the gas tank outlet (5) and the attached gas line filter; also the pressure relief valve (8). These items are to be installed on the replacement tank.

To Remove Muffler

- Remove the hood and headlight assembly. Refer to Hood Removal and Installation.

CAUTION

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Loosen the flexible tube clamp securing the flexible exhaust tube to the muffler and release the tube. NOTE: The Mark V Ski-Daddler has dual exhaust tubes and muffler.

- Loosen the bolt and nut securing the muffler to the mounting band assembly. Remove the muffler.

- Installation procedures are the reverse of removal.

*To Remove Bogie Wheel***CAUTION**

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Place Ski-Daddler on the kickstand.

- Remove the locknut (3, figure 13) securing the bogie wheel assembly (2) to the axle shaft and remove the wheel.

- During reassembly, torque the locknut (3) to 28 foot-pounds. Be certain the wheel assembly (2) is installed with grease fittings on the outside.

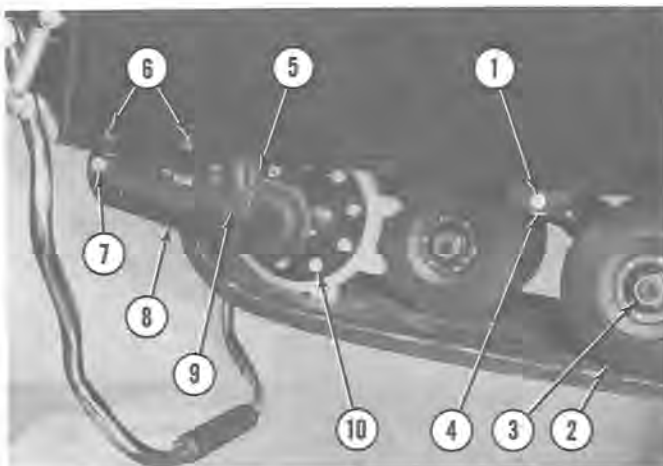


Figure 13

*To Remove Bogie Wheel and Support Assembly***CAUTION**

Always disconnect the sparkplug wires before working on the engine or drive elements.

- Place the Ski-Daddler on the kickstand.

- Remove the screws (1, figure 13) and washers securing the bogie wheel support shaft to the main frame.

- Remove the bogie wheel and support assembly.

- Reassembly is the reverse of removal.

To Remove Bogie Wheel Torsion Springs

- Remove the bogies as described in paragraph To Remove Bogie Wheel and Support Assembly.

- Remove the support shaft and separate the bogie wheel support halves.

- Remove the torsion springs.

NOTE: The torsion springs are identified as right- and left-hand springs. Note the direction of the coils and the position of the springs to facilitate reassembly.

- Reassembly is the reverse of removal.

To Remove Traction Belt Take-Up Assembly

- Place Ski-Daddler on the kickstand.

- Remove the rear bogies. Refer to paragraph To Remove Bogie Wheel and Support Assembly.

- Release track tension by loosening adjusting bolts (5, figure 13).

- Release the support arm torsion springs connected to the main frame.

- Remove the right- and left-hand adjusting angle locknuts (6), washers and carriage bolts securing the traction belt take-up assembly to the main frame.

- Remove the traction belt take-up assembly as a unit.

NOTE: The traction belt take-up assembly consists of the rear sprocket assembly, spacer and associated hardware held together by the rear support arm assemblies. If necessary to remove seals or sprockets, proceed as follows.

- Carefully pry the oil seal away from the rear support arm assembly (8) and remove the support arm and adjusting angle (9) clear of the sprocket shaft and bearing.

- Remove the press-on bearings and grease seals.

- Remove the screws (10) and nuts securing the sprocket plate and the sprocket to the drive shaft. Remove the plate and sprocket.

- Reassembly is the reverse of removal. During reassembly follow instructions outlined in paragraphs Track Alignment and Track Tension Adjustment.

To Remove Sprocket Seals and Bearings

- Sprocket seals and bearings are located on each end of the traction belt take-up assembly and the drive sprocket assembly drive shafts. To replace the seals or bearings it will be necessary to remove the traction belt take-up assembly or the drive sprocket assembly as described in the applicable paragraph.

To Remove Drive Sprocket Assembly

- Remove the hood assembly and set the machine on its right-hand side.

CAUTION

Always disconnect spark plug wires before working on the engine or drive elements.

- Release the chain cover straps and remove the chain cover top.

- Remove the lower sprocket from the drive sprocket shaft and remove the sprocket and chain as described in paragraph To Remove Drive Chain.

- Using a screwdriver, carefully pry the oil seals (figure 14) away from the bearings at each end of the drive shaft.

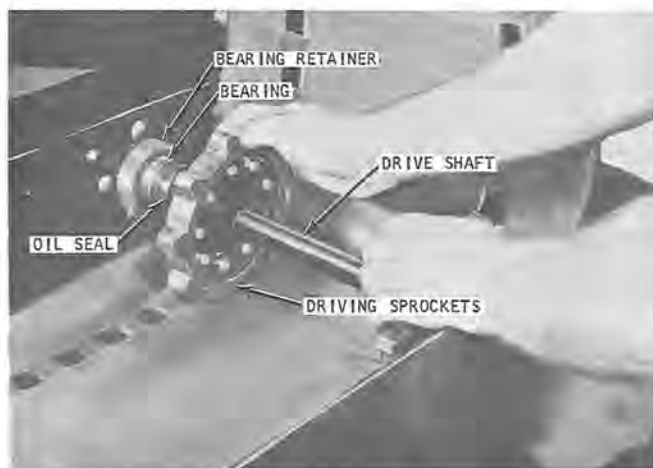


Figure 14

- Remove the carriage bolts and nuts securing the bearing retainer to the chain case side of the main frame. Remove the retainer.

- Move the drive shaft and sprocket assembly toward the chain side until the opposite end of the shaft clears the bearing retainer. Remove the drive sprocket assembly.

- To replace the sprockets, remove the ball bearing and oil seal. Remove the screws and nuts securing the support plate and sprocket to the drive shaft and sprocket plate assembly. Remove the sprocket.

- Reassembly is the reverse of removal. During reassembly follow instructions outlined in the paragraphs Track Tension Adjustment, Track Alignment, and Drive Chain Adjustment.

To Remove Traction Belt

- Place the Ski-Daddler on the kickstand.

- Remove the bogie assemblies. Refer to paragraph To Remove Bogie Wheel and Support Assembly.

- Remove the traction belt take-up assembly. Refer to paragraph To Remove Traction Belt Take-Up Assembly. **NOTE:** It is not necessary to disassemble the traction belt take-up assembly when removing the traction belt.

- Remove the drive sprocket assembly. Refer to paragraph To Remove Drive Sprocket Assembly.
- Remove the traction belt.
- Reassembly is the reverse of removal. During reassembly follow instructions given in paragraphs Traction Belt Adjustment, and Drive Chain Adjustment.

Traction Belt Adjustment

IMPORTANT: The traction belt must be checked regularly for proper alignment and tension. When necessary to adjust the belt, first perform the traction belt alignment and then complete the traction belt adjustment procedures.

Traction Belt Alignment

- Set the snowmobile on the kickstand on a level surface.
- Stand to rear of sled and visually check the space between the frame tunnel and the edges of the traction belt. On a properly aligned track this space should be the same.
- If the track is not centered, loosen the two locknuts (1, figure 15) on that side where the edge of the track is closest to the inside edge of the tunnel. Tighten the adjusting screw (3) until track is centered.

CAUTION

Never run the engine inside a building without first opening all doors and windows to insure proper ventilation.

- With the snowmobile on its kickstand, start the engine. Allow track to rotate several turns and then recheck track alignment to ensure that proper alignment is maintained.
- After track alignment is complete, tighten all locknuts (1) and then check traction belt tension as described in the following paragraph.

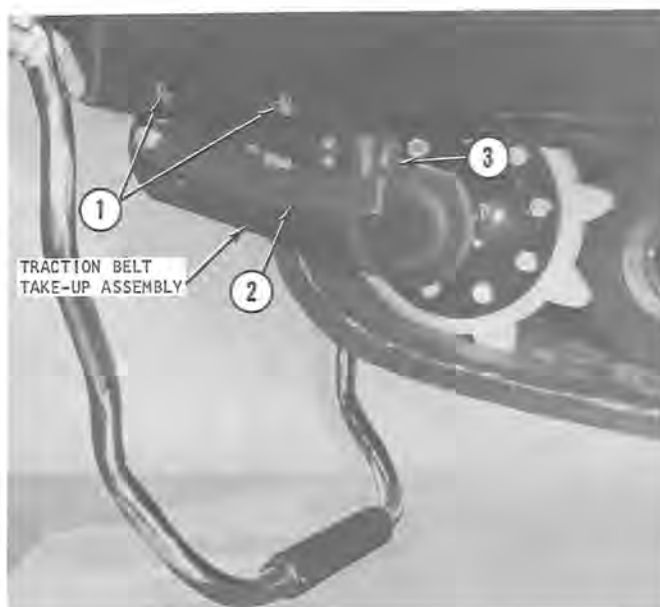


Figure 15

Traction Belt Tension Adjustment

IMPORTANT: Always check the traction belt for proper alignment before performing the traction belt tension alignment procedures.

- Set the snowmobile on a clean, flat surface. Do not use the kickstand.

NOTE: A properly tensioned track should have a 1 to 1-1/4-inch sag at the approximate top center of the track. This can be determined as follows:

- Rest a straight bar (figure 16) of sufficient length along the top surface and near the edge of the track. Insert the straight bar through the back end of the snowmobile and check for proper 1 to 1-1/4-inch sag. Repeat procedure on opposite side and note the difference, if any, in the track tension.
- If adjustment is necessary, loosen the two locknuts (1, figure 15) on each side of the sled just sufficiently to allow movement of the belt-adjusting angle (2).
- Turn the adjusting screws (3) clockwise to tighten and counterclockwise to loosen until proper track tension is achieved. **IMPORTANT:** Adjust both screws (3) equally so as not to disturb the track alignment.

CAUTION

Never run the engine inside a building without first opening all doors and windows to insure proper ventilation.

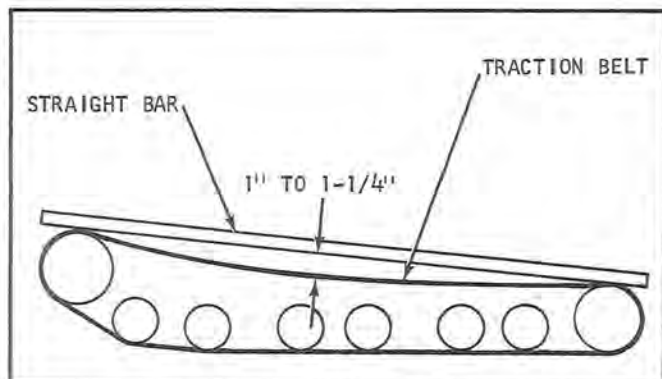


Figure 16

- Set the snowmobile on its kickstand and start the engine. Allow track to rotate several turns and then repeat the track tension adjustment procedure to ensure that proper tension is maintained.

- Retighten the locknuts (1) on both sides of the snowmobile.

Spark Plug Interchangeability

The following tabulation is provided to show correct spark-plug interchangeability.

Bosch	Champion	AC	Autolite	Lodge	NGK
M175T1	UK-10	M84	BZ3	HTN18	AB-6
M225T1	K-9	M83		HTN18	A-7
M240T1	UK-7				

Wiring Diagrams

Electrical wiring diagrams are provided for the trained technicians using this manual. Each diagram is identified with the model number of the snowmobile to which it applies.

Troubleshooting

ENGINE HARD TO START. Fuel line blocked or leaking; ruptured fuel-pump diaphragm; ignition or switch wiring loose or grounded; spark plug(s) fouled or faulty; contact breaker points pitted or burned.

ENGINE STOPS. Fuel tank empty; fuel flow obstructed; ignition system faulty. Spark plug(s) fouled or dirty. Engine too hot and pistons seizing; carburetor setting too lean or incorrect grade of oil being used.

ENGINE STOPS, FUEL TANK HALF EMPTY. Carburetor-to-tank fuel line connected incorrectly. Be certain the gas tank-to-carburetor line is connected to the OUT fitting on the gas tank outlet and to the inlet fitting on the carburetor. The recirculating line, carburetor-to-tank must be connected to the IN fitting on the gas tank outlet (figure 12) and to the recirculating elbow (figure 8).

ENGINE OPERATES IRREGULARLY. Spark plug loose, fouled or faulty; ignition switch wiring grounded; carburetor trouble. Engine holddown bolts loose; carburetor dirty. Ignition timing off.

ENGINE WORKING FOUR-STROKE. Choke shut; carburetor settings incorrect; dirt preventing carburetor inlet needles from seating properly.

ENGINE LOSES POWER. Poor compression due to loose head and crankcase bolts. Faulty ignition; timing; piston rings sticking due to the use of improper oil. Carbon deposits in cylinder.

ENGINE BACKFIRES THROUGH CARBURETORS. Carburetor fuel-supply channel clogged.

ENGINE BACKFIRES THROUGH EXHAUST. Incorrect or faulty spark plug(s); faulty ignition coil or condenser; loose ignition wiring.

ENGINE OVERHEATS. Insufficient or incorrect grade oil in fuel mixture; carburetor or fuel line partly clogged; carburetor setting too lean; ignition timing too slow.

EXCESSIVE FUEL CONSUMPTION. Carburetor fuel line or gas tank leaking; choke closed; incorrect carburetor setting.

THROTTLE CONTROL. Excessive play in throttle control lever caused by loose throttle control cable.

STEERING. Poor steering ability caused by improperly adjusted skis; steering linkage loose or out of adjustment. U-bracket bolts on roll bar too tight or too loose. Spring, U-bracket loose.

BRAKES. Excessive play in handbrake due to loose brake cable or worn pads.

Mark V Only

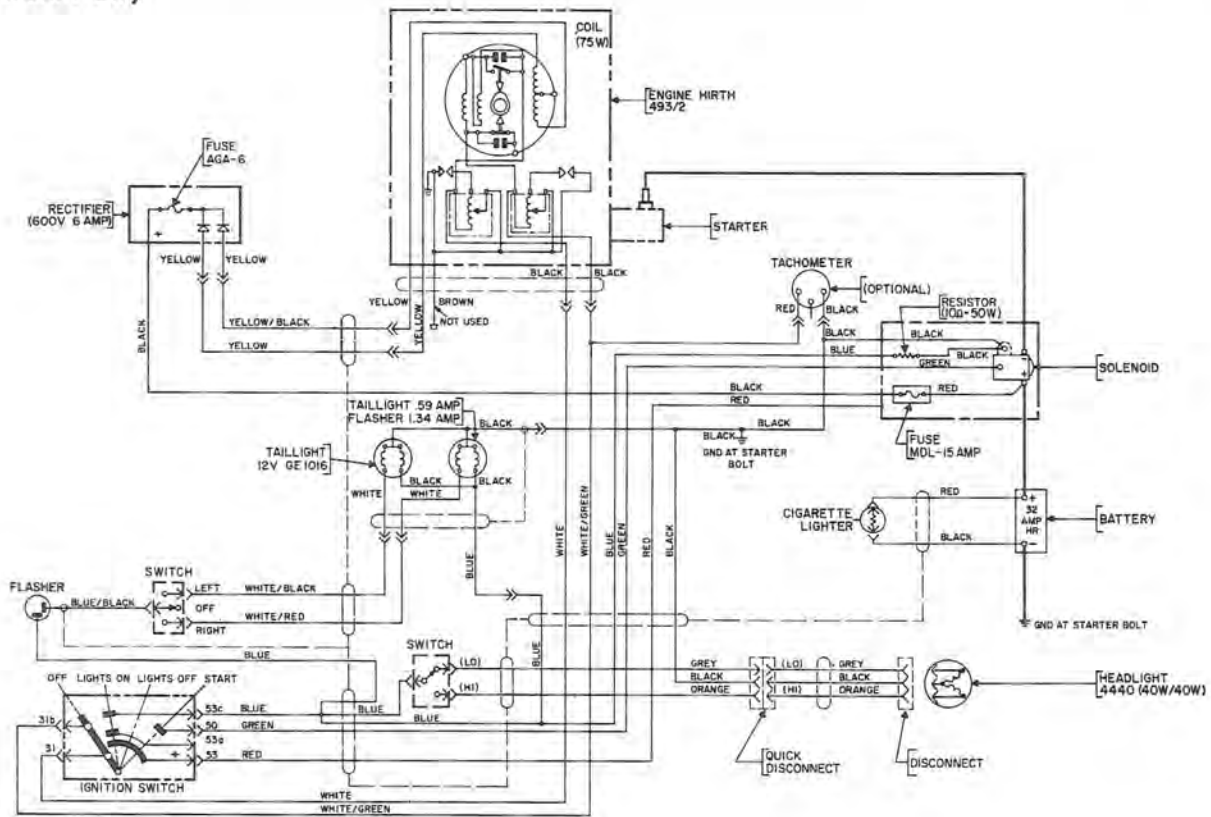


Figure 18

This Illustrated Parts List is provided to facilitate the procurement of spare parts and sled disassembly in support of all Ski-Daddler models covered in the Maintenance Section of this manual. Where component parts or assemblies are common to all Ski-Daddler models, no model designation follows the item description. Where the component part or assembly applies to a specific Ski-Daddler model, the model designation will follow in the description column.

All spare parts necessary to service AMF Ski-Daddlers are available through AMF-Authorized Distributors.

PARTS-LIST SECTION

This portion of the dealer's manual consists of two sections, an illustrated parts list and a numerical index.

PARTS LIST

The parts-list portion consists essentially of exploded-view illustrations, keyed to the figure-reference column by index numbers. The list is arranged in the following columns:

Figure-and-Index Number. The number preceding the dash refers to the figure number on which the item is shown. The number following the dash refers to the part as indicated on the exploded view.

Part Number. The second column calls out the AMF part number applicable to the figure-and-index number and its corresponding index number on the exploded view.

Description. The description column identifies the part with descriptive nomenclature. In all cases, standard hardware is further described with data covering thread size, length, ID, OD and thickness where necessary.

Quantity. This column provides the total number of item units required for the particular application indicated by the item number.

Model Code. This column codes the Ski-Daddler models for which the part applies. The following lists the code-to-model relationship:

- A - MK IV (SD15P10A)
- B - MK V (SD18E20A)

Where no code letter appears in the model column, the part applies to all models.

All model codes will be listed at the bottom of each parts listing to provide a ready reference.

NUMERICAL INDEX

The numerical index is provided to afford dealers and distributors with a means of determining to which models their stock applies. The index consists of the following three columns:

Part-Number Column. The part-number column tabulates all parts called out in the parts list. The part numbers are listed in numerical order starting with the first digit in the number. It should be noted, for example, that a four-digit number starting with the number 8 would be listed after a five-digit number starting with a 3 or a six-digit number starting with a 1.

Index-Number Column. The index-number column reflects the figure-and-index number of the part within the parts list.

Quantity Column. The quantity column reflects the total number of parts required for the particular figure-and-index-number application. In certain cases, quantities differ between sled models. This circumstance is covered by providing the same figure-and-index number with different quantities. In referring to the parts-list section, the proper quantity per sled may be determined.

Figure 1. Sheet 1 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
1-	37050	SKI-DADDLER, MK IV, MODEL NO. SD15P10A	1	A
	34900	SKI-DADDLER, MK V, MODEL NO. SD18E20A	1	B
-1	35016	HOOD AND HEADLIGHT ASSEMBLY	1	A
		(See figure 2)		
	34985	HOOD AND HEADLIGHT ASSEMBLY	1	B
		(See figure 2)		
-2	37030	WINDSHIELD, 15-IN.	1	A
	37029	WINDSHIELD, 18-IN.	1	B
-3	37080	BUMPER ASSEMBLY, RH (See figure 2)	1	A
	35000	BUMPER ASSEMBLY, RH (See figure 2)	1	B
	37081	BUMPER ASSEMBLY, LH (See figure 2)	1	A
	35001	BUMPER ASSEMBLY, LH (See figure 2)	1	B
-4	37650	CONSOLES AND STEERING ASSEMBLY	1	A
		(See figure 3)		
	37707	CONSOLES AND STEERING ASSEMBLY	1	B
		(See figure 3)		
-5	9000305	SCREW, Truss HD, 1/4-28 by 1-3/4	4	
-6	33808	WASHER, Formed	4	
-7	9000123	LOCKNUT, 1/4-28	4	
-8	9000302	SCREW, Truss HD, 1/4-28 by 5/8	2	
-9	9000123	LOCKNUT, 1/4-28	2	
-10	34916	SKI AND SPRING ASSEMBLY (See figure 3)	2	A
	37245	SKI AND SPRING ASSEMBLY (See figure 3)	2	B
-11	37184	REAR HANDLE ASSEMBLY	2	
-12	181573	BOLT, Hex HD, 1/4-28 by 1-1/4	4	
-13	9416904	WASHER, Plain	4	
-14	33808	WASHER, Formed	4	
-15	446188	WASHER, Plain	4	
-16	9000123	LOCKNUT, 1/4-28	4	
-17	32234	SPRING, Kickstand	2	
-18	181578	BOLT, Hex HD, 1/4-28 by 1-7/8	4	
-19	37186	SPACER, Long	2	
-20	33778	SPACER, Short	2	
-21	33808	WASHER, Formed	4	
-22	9000123	LOCKNUT, 1/4-28	4	
-23	37176	KICKSTAND ASSEMBLY	1	A
	37175	KICKSTAND ASSEMBLY	1	B
-24	181575	BOLT, Hex HD, 1/4-28 by 1-1/2	2	
-25	33808	WASHER, Formed	2	
-26	446188	WASHER, Flat	4	
-27	9000123	LOCKNUT, 1/4-28	2	
-28	37809	REAR CONSOLE SEAT AND TOOLBOX	1	A
		ASSEMBLY (See figure 4)		
	33764	REAR CONSOLE SEAT AND TOOLBOX	1	B
		ASSEMBLY (See figure 4)		
-29	9000123	LOCKNUT, 1/4-28	6	
-30	446188	WASHER, Plain	6	
-31	9000124	LOCKNUT, 5/16-24	4	
-32	274865	WASHER, Plain	4	
-33	37351	HINGE, Hitch	1	
-34	181581	BOLT, Hex HD, 1/4-28 by 2-1/2	1	
-35	120392	WASHER, Plain	1	

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 1. Sheet 2 of 5

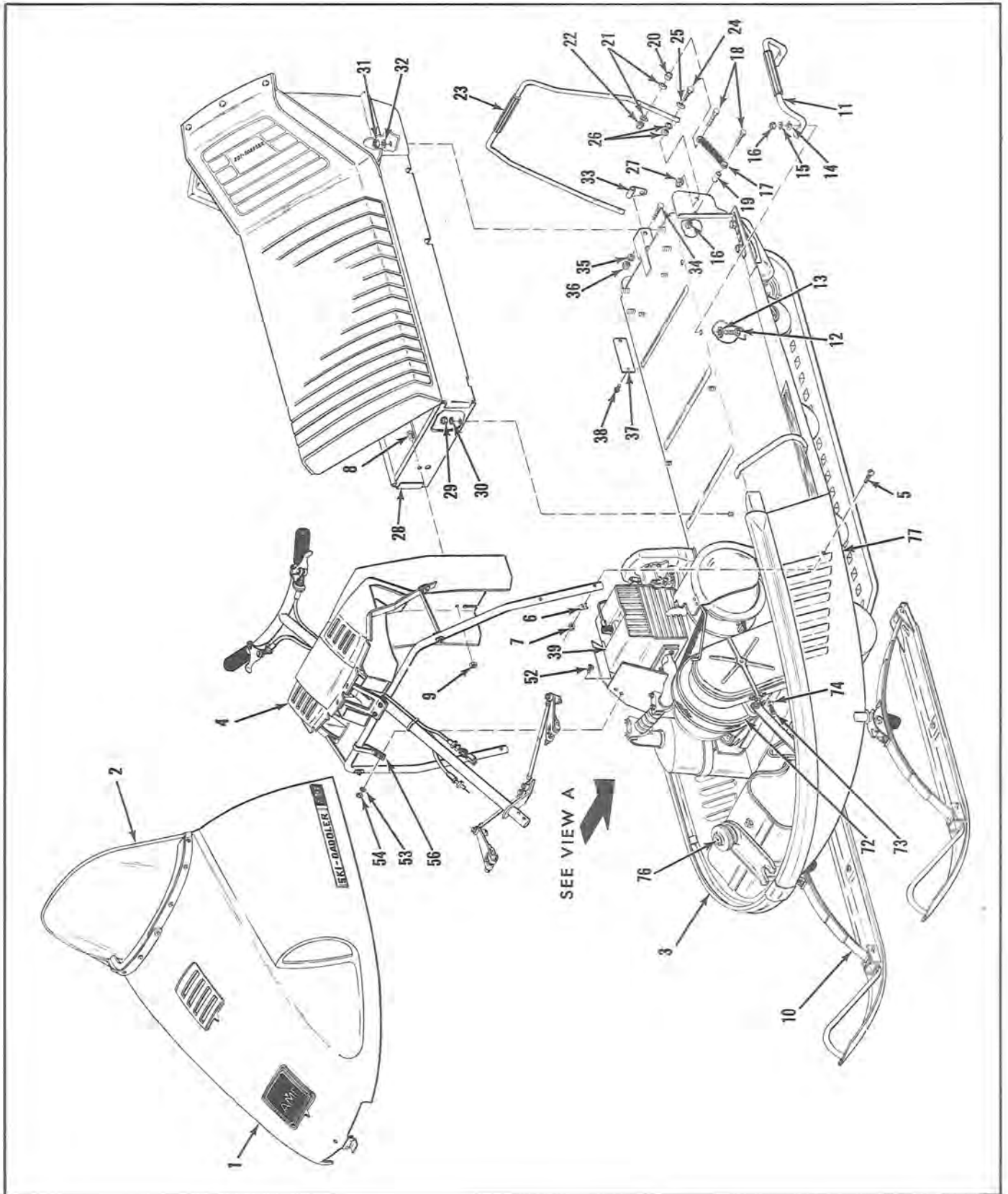


Figure 1. Sheet 3 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
1-36	9000123	LOCKNUT, 1/4-28	1	
-37	37122	MODEL TAG, Ski-Daddler	1	
-38	447811	SCREW, Pan HD, 8-32 by 3/8	2	
-39	37120	ENGINE AND SUPPORT ASSEMBLY	1	A
		(See figure 5)		
	34927	ENGINE AND SUPPORT ASSEMBLY	1	B
		(See figure 5)		
-40	9000324	BOLT, Carriage, 3/8-24 by 2-1/4	4	
-41	32532	NUT, Tinnerman	4	
-42	32528	BUSHING	4	
-43	33769	SPACER, Rubber	4	
-44	33595	WASHER (Used on three mounts only)	3	
-45	9000125	LOCKNUT, 3/8-24	4	
-46	33768	SHOCK MOUNT	4	
-47	37582	HEAT SHIELD ASSEMBLY	1	A
	37698	HEAT SHIELD ASSEMBLY	1	B
-48	37801	PAD	2	A
	37801	PAD	1	B
-49	37583	GASKET	1	A
-50	37584	GROMMET, Half	1	A
-51	9000911	GROMMET	2	B
-52	9000302	SCREW, Truss HD, 1/4-28 by 5/8	3	
-53	120392	WASHER, Plain	3	
-54	9000123	LOCKNUT, 1/4-28	3	
-55	37344	BRACKET, Heat shield	1	
-56	37345	SUPPORT, Heat shield	1	
-57	37765	BATTERY SUPPORT AND ELECTRICAL	1	B
		ASSEMBLY (See figure 6)		
-58	181566	BOLT, Hex HD, 1/4-28 by 3/4	2	B
-59	181003	BOLT, Hex HD, 1/4-28 by 5/8	2	B
-60	120392	WASHER, Plain	4	B
-61	9000123	LOCKNUT, 1/4-28	4	B
-62	37203	TRACTION BELT TAKE-UP ASSEMBLY	1	A
		(See figure 7)		
	34924	TRACTION BELT TAKE-UP ASSEMBLY	1	B
		(See figure 7)		
-63	9000322	BOLT, Carriage, 5/16-24 by 3/4	2	
-64	456145	WASHER, Flat	2	
-65	9000124	LOCKNUT, 5/16-24	2	
-66	37083	BOGIE ASSEMBLY (See figure 8)	3	A
-67	34901	BOGIE ASSEMBLY, Middle and rear	2	B
		(See figure 8)		
-68	34904	BOGIE ASSEMBLY, Front (See figure 8)	1	B
-69	181595	SCREW, Hex HD, 5/16-24 by 3/4	6	
-70	138485	LOCKWASHER	6	
-71	34960	BELT, Traction	1	A
	37145	BELT, Traction	1	B
-72	37115	DRIVEN CLUTCH AND MOUNTING	1	A
		ASSEMBLY (See figure 9)		
	34928	DRIVEN CLUTCH AND MOUNTING	1	B
		ASSEMBLY (See figure 9)		
-73	181643	BOLT, Hex HD, 3/8-24 by 1-1/2	2	

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 1. Sheet 4 of 5

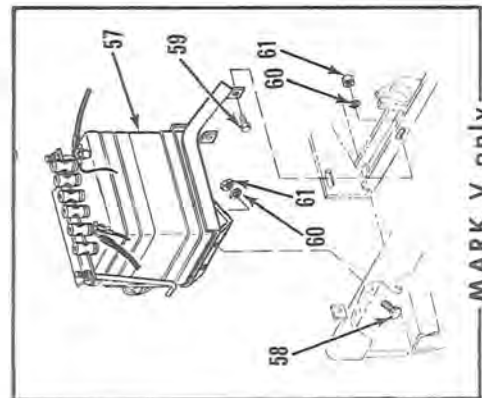
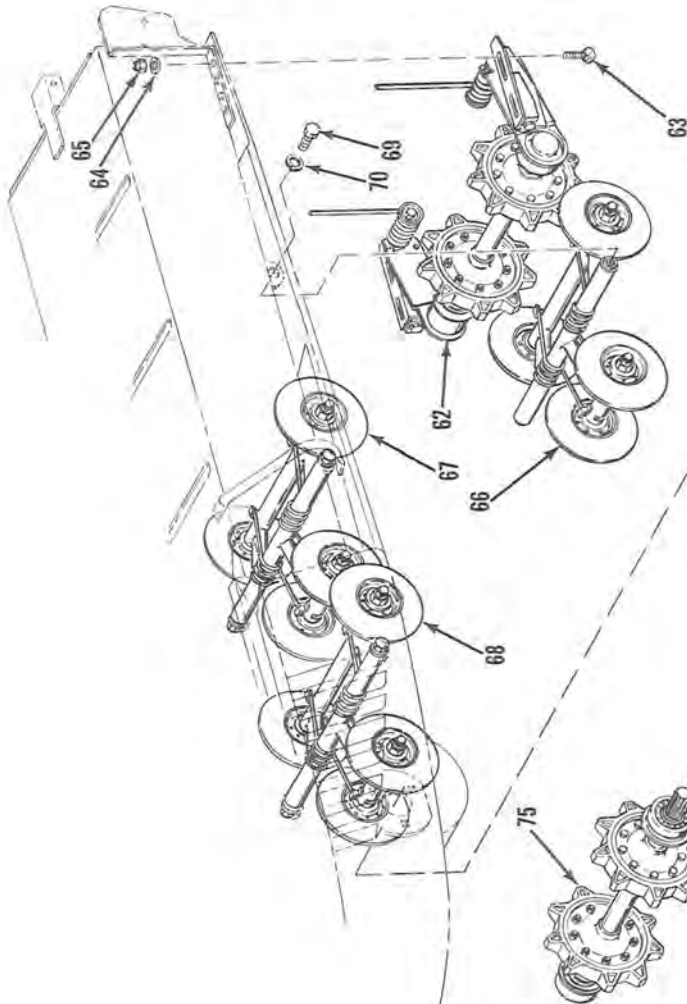
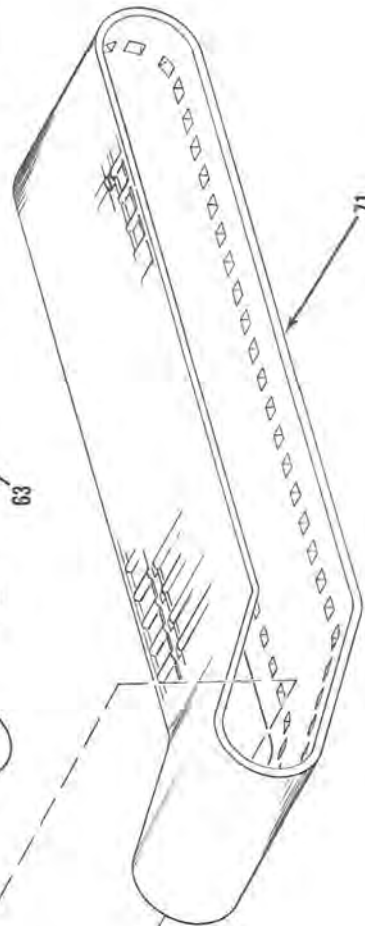
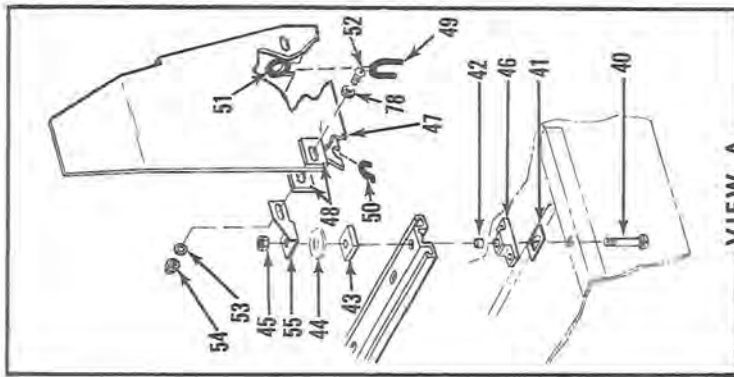


Figure 1. Sheet 5 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
1-74	120382	LOCKWASHER	2	
-75	37113	DRIVE SPROCKET ASSEMBLY (See figure 9) ..	1	A
	34929	DRIVE SPROCKET ASSEMBLY (See figure 9) ..	1	B
-76	37266	GAS CAP AND INDICATOR ASSEMBLY (See figure 10)	1	A
	37683	GAS CAP ASSEMBLY (See figure 10)	1	B
-77	37013	MAIN FRAME ASSEMBLY	1	A
	34932	MAIN FRAME ASSEMBLY	1	B
-78	37778	SPACER	1	
				A - MK IV (SD15P10A)
				B - MK V (SD18E20A)

Figure 2. Sheet 1 of 3

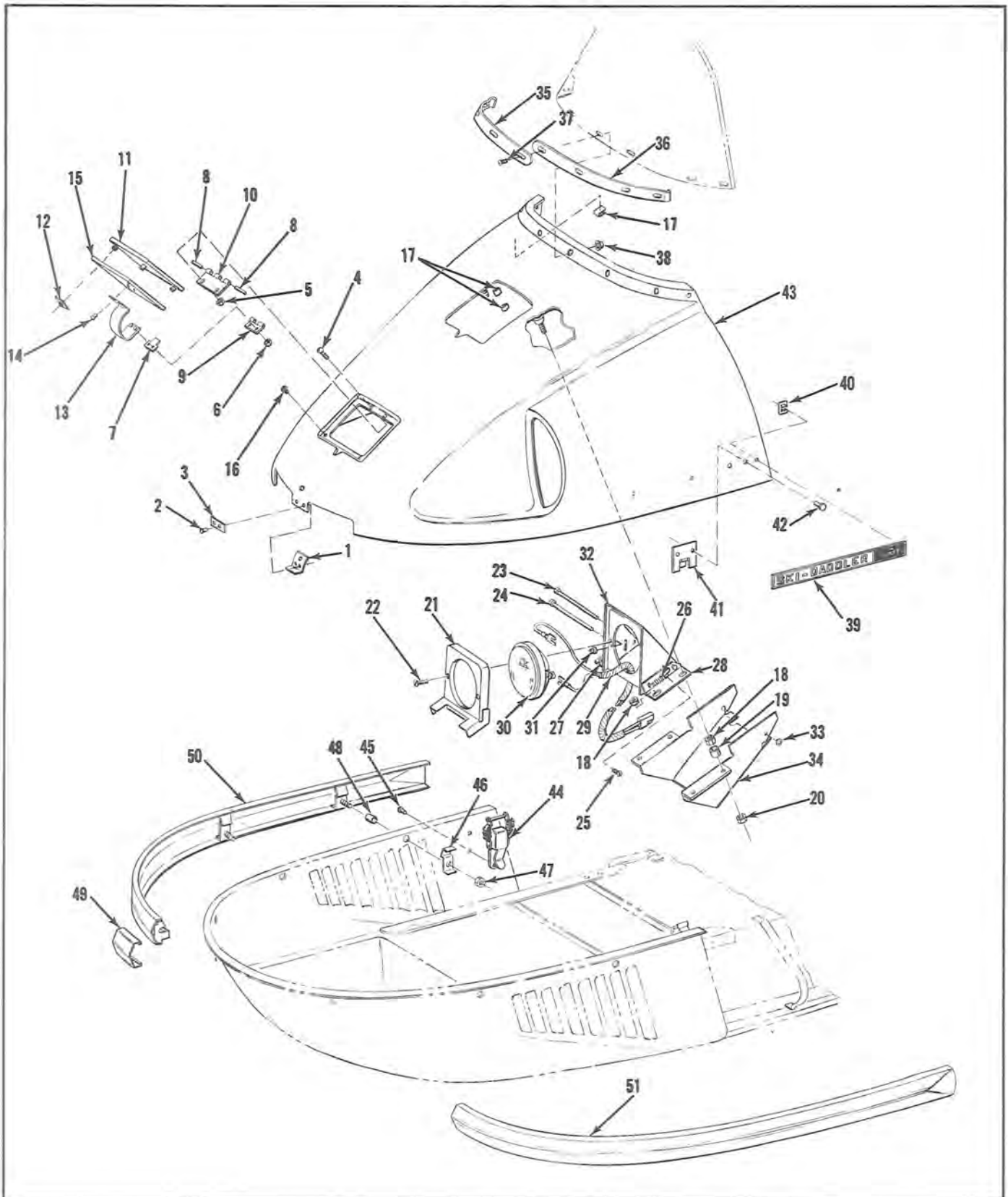


Figure 2. Sheet 2 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
2-	35016	HOOD AND HEADLIGHT ASSEMBLY	REF	A
		(See figure 1)		
	34985	HOOD AND HEADLIGHT ASSEMBLY	REF	B
		(See figure 1)		
-1	34984	CLIP, Hood	1	
-2	34271	RIVET	3	
-3	37045	PLATE, Hood	1	
	37000	GAS LID AND HINGE ASSEMBLY	1	
-4	132908	SCREW, RD HD, 10-32 by 1/2	2	
-5	9000122	LOCKNUT, 10-32	2	
	37006	HINGE ASSEMBLY	1	
		(Consists of items 8, 9, and 10)		
-6	9000122	LOCKNUT, 10-32	2	
-7	37005	SPRING, Flat	1	
-8	424250	PIN, 1/8 IN. DIA by 7/8	2	
-9	37008	HINGE, Upper	1	
-10	37007	HINGE, Lower	1	
-11	34991	ESCUTCHEON, Gas cover	1	
-12	445170	NUT, Spring, 3/16	4	
	37001	GAS LID ASSEMBLY	1	
		(Consists of items 13, 14, and 15)		
-13	37003	BRACKET, Support	1	
-14	34271	RIVET	4	
-15	37002	GAS LID	1	
-16	37051	RUBBER BUMPER, Gas lid	2	
-17	33610	CLIP, Wiring harness	3	
	37052	HEADLIGHT ASSEMBLY	1	A
	35021	HEADLIGHT ASSEMBLY	1	B
-18	124818	JAM NUT, Hex HD, 1/4-20	4	
-19	33647	SPACER	2	
-20	34058	LOCKNUT, 1/4-20	4	
-21	37055	COVER ASSEMBLY, Headlight	1	
-22	437028	SCREW, PAN HD, 8-32 by 1-1/4	2	
-23	35027	SHAFT, Pivot	1	
-24	35028	SHAFT, Spring	1	
-25	273407	SCREW, Truss HD, 8-32 by 3/8	4	
-26	35029	SPRING, Extension	2	
-27	35023	BRACKET, RH	1	
-28	35024	BRACKET, LH	1	
-29	37108	HARNESS, Hood	1	A
	37069	HARNESS, Hood	1	B
-30	37111	HEADLIGHT	1	A
	37057	HEADLIGHT	1	B
	37009	HOUSING ASSEMBLY	1	
-31	9000461	RIVNUT, 8-32	2	
-32	35022	HOUSING	1	
-33	37471	GROMMET, Air duct	1	
-34	37284	AIR DUCT, Hood	1	A
	37709	AIR DUCT, Hood	1	B
-35	37033	TRIM STRIP, RH	1	A
	37031	TRIM STRIP, RH	1	B
-36	37034	TRIM STRIP, LH	1	A
	37032	TRIM STRIP, LH	1	B

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 2. Sheet 3 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
2-37	125680	SCREW, Truss, HD, 1/4-20 by 5/8	7	
-38	9000462	RIVNUT, 1/4-20	7	
-39	34992	ESCUTCHEON, Side	2	
-40	445170	NUT, Spring	6	
-41	35011	STRIKE	2	
-42	34271	RIVET	4	
-43	35017	HOOD	1	A
	34986	HOOD	1	B
-44	34989	CATCH, Hood	2	
-45	34271	RIVET	4	
-46	35005	GUIDE, Hood	6	
-47	9000123	LOCKNUT, 1/4-28	6	
-48	34983	SPACER	6	
-49	37591	COVER, Bumper	1	
-50	37080	BUMPER ASSEMBLY, RH (See figure 1)	REF	A
	35000	BUMPER ASSEMBLY, RH (See figure 1)	REF	B
-51	37081	BUMPER ASSEMBLY, LH (See figure 1)	REF	A
	35001	BUMPER ASSEMBLY, LH (See figure 1)	REF	B

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 3. Sheet 1 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
3-	37650	CONSOLES AND STEERING ASSEMBLY (See figure 1)	REF	A
	37707	CONSOLES AND STEERING ASSEMBLY (See figure 1)	REF	B
	37040	STEERING LINKAGE ASSEMBLY	2	A
	34976	STEERING LINKAGE ASSEMBLY	2	B
-1	33320	ARM, Spindle	2	
-2	181650	BOLT, Hex HD, 3/8-24 by 2-1/2	2	
-3	21777	SPACER	4	
-4	30251	SPACER	2	
-5	9000125	LOCKNUT, 3/8-24	2	
	37041	TIE ROD ASSEMBLY	2	A
	34942	TIE ROD ASSEMBLY	2	B
-6	181641	BOLT, Hex HD, 3/8-24 by 1-3/8	2	
-7	21777	SPACER	4	
-8	9000125	LOCKNUT, 3/8-24	2	
-9	30081	ROD END	4	
-10	124925	JAM NUT, Hex, 3/8-24	4	
-11	37042	TIE ROD	2	A
	34943	TIE ROD	2	B
	34949	STEERING COLUMN ASSEMBLY	1	
-12	181579	BOLT, Hex HD, 1/4-28 by 2	2	
-13	147579	WASHER, Plain, 1/4	4	
-14	34688	U-STRAP	1	
-15	34694	WEARPLATE	1	
-16	34689	WEARPLATE	1	
-17	9000123	LOCKNUT, 1/4-28	2	
-18	37231	GRIP, Hand	2	
-19	32185	THUMB CONTROL ASSEMBLY	2	
-20	37159	BRAKE CONTROL ASSEMBLY	1	
-21	37149	THROTTLE CABLE, HOUSING AND BOOT ASSEMBLY	1	
-22	32286	CLIP, Wire	2	
-23	34946	STEERING HANDLE AND COLUMN ASSEMBLY	1	
	37166	CONSOLE DOOR ASSEMBLY	1	A
	37451	CONSOLE DOOR ASSEMBLY	1	B
-24	37167	RETAINER, Console door	1	
-25	37168	FASTENER, 1/4 turn	1	
-26	37137	DOOR, Console	1	A
	37448	DOOR, Console	1	B
	37136	CONSOLE TONGUE ASSEMBLY	1	
-27	9000302	SCREW, Truss HD, 1/4-28 by 5/8	4	
-28	147579	WASHER, Plain	4	
-29	9000123	LOCKNUT, 1/4-28	4	
-30	37169	CLIP-ON RECEPTACLE, Console door	1	
-31	34993	DECAL, Console tongue	1	
-32	37133	CONSOLE TONGUE	1	
	37067	MINI-CONSOLE ASSEMBLY	1	A
	37035	MINI-CONSOLE ASSEMBLY	1	B
-33	181576	BOLT, Hex HD, 1/4-28 by 1-5/8	2	
-34	147579	WASHER, Plain	2	

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 3. Sheet 2 of 5

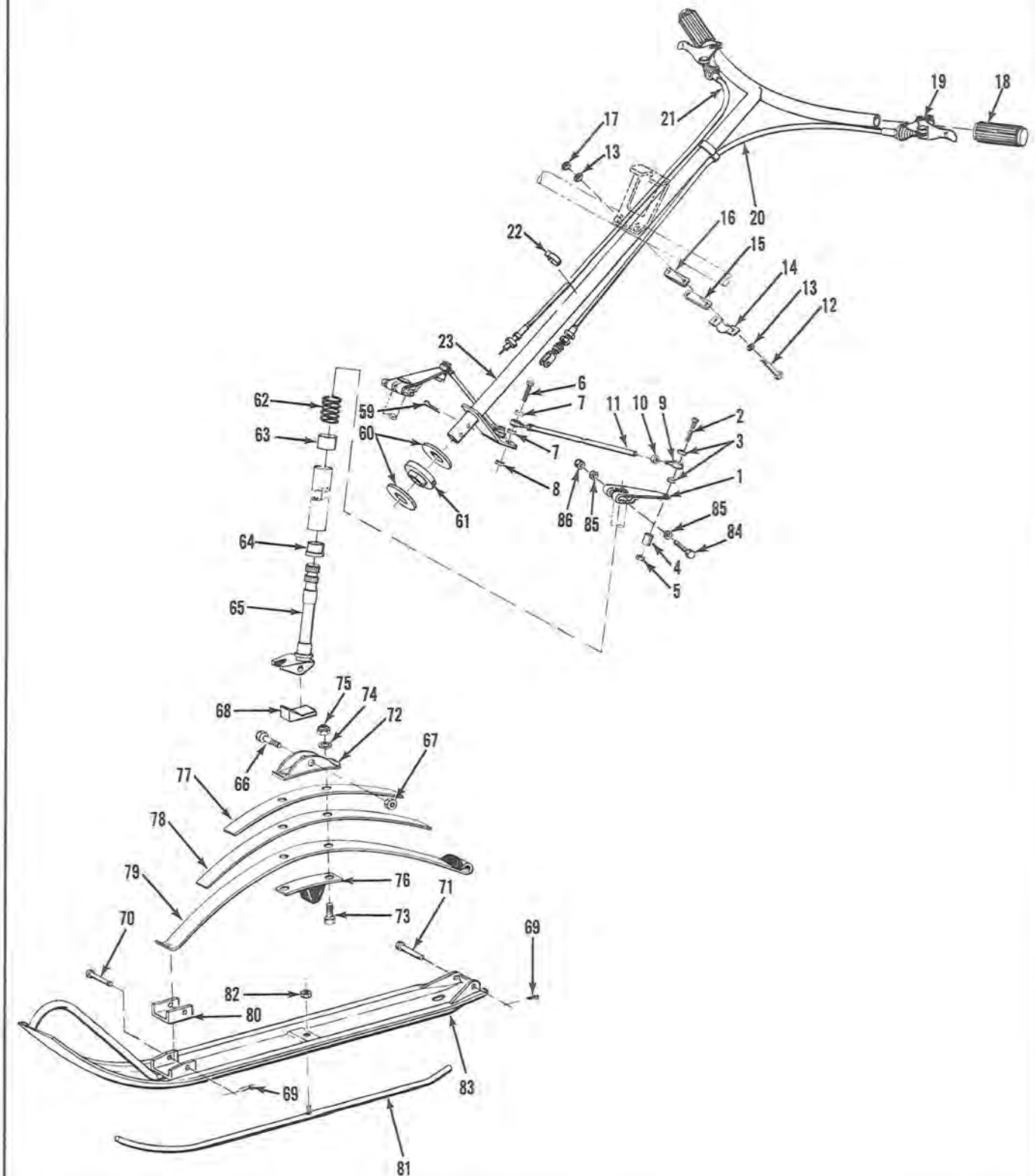


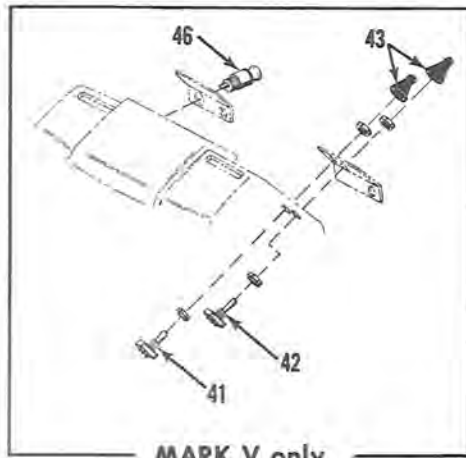
Figure 3. Sheet 3 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
3-35	33808	WASHER, Formed	2	
-36	9000123	LOCKNUT, 1/4-28	2	
-37	37374	BAR, Console support	2	A
	37036	BAR, Console support	2	B
-38	34271	RIVET	4	
-39	37135	PLATE, Console back-up	2	
-40	37072	SWITCH, Key	1	
-41	37075	SWITCH, Toggle, 2-position	1	B
-42	37076	SWITCH, Toggle, 3-position	1	B
-43	1500480	BOOT, Rubber, toggle switch	2	B
-44	34997	DECAL, LH	1	A
	34996	DECAL, LH	1	B
-45	37230	CONTROL, Choke	1	
-46	1500477	LIGHTER, Cigarette	1	B
-47	34998	DECAL, RH	1	
-48	35044	MINI-CONSOLE	1	
-49	37286	AIR DUCT, LH	1	
	37285	AIR DUCT, RH	1	
-50	37037	BRACKET, Console	1	
-51	120612	SCREW, Flat HD, 10-32 by 5/8	2	
-52	9000122	LOCKNUT, 10-32	2	
-53	37039	ROLL BAR	1	A
	37038	ROLL BAR	1	B
-54	37432	BRACKET, Flasher	1	B
-55	436756	SCREW, Pan HD, 10-32 by 1-1/2	1	B
-56	446143	WASHER, Plain	1	B
-57	9000122	LOCKNUT, 10-32	1	B
-58	37077	FLASHER	1	B
-59	137258	COTTER PIN, 3/16 by 1-3/4	2	
-60	37124	WASHER, Steering column	2	
-61	34945	BUSHING, Steering column	1	
-62	30149	SPRING, Spindle	2	
-63	33753	BEARING, Plain	2	
-64	33756	BEARING, Flange	2	
-65	37222	SPINDLE	2	
	34916	SKI AND SPRING ASSEMBLY (See figure 1)	REF	A
	37245	SKI AND SPRING ASSEMBLY (See figure 1)	REF	B
-66	187044	SCREW, Hex HD, 3/8-24 by 3-1/2	2	
-67	9000125	LOCKNUT, 3/8-24	2	
-68	37226	PAD, Spindle	2	
	34920	SKI SPRING ASSEMBLY	2	A
	37411	SKI SPRING ASSEMBLY	2	B
-69	144518	COTTER PIN	4	
-70	33748	PIVOT PIN, Spring	2	
-71	28762	PIN, Pivot	2	
-72	33732	BRACKET ASSEMBLY, Spring mounting	2	A
	37412	BRACKET ASSEMBLY, Spring mounting	2	B
-73	181639	SCREW, Hex HD, 3/8-24 by 1-1/4	4	
-74	274517	WASHER, Flat, 3/8	4	
-75	9000125	LOCKNUT, 3/8-24	4	
-76	34969	BUMPER ASSEMBLY	2	
-77	33731	LEAF SPRING, Top	2	

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 3. Sheet 4 of 5



MARK V only

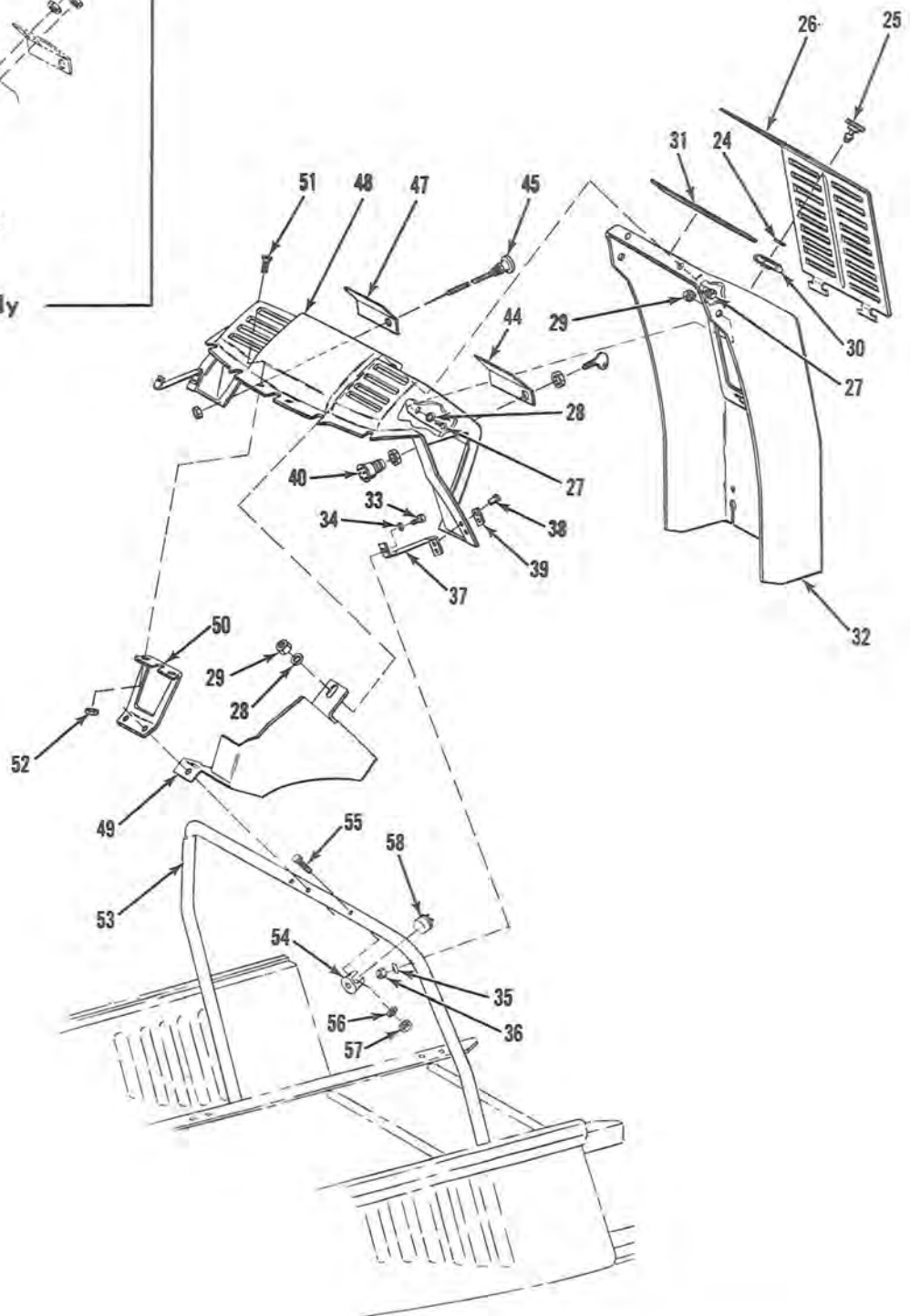


Figure 3. Sheet 5 of 5

Figure & Index Number	Part Number	Description	Qty	Model Code
3-78	33730	LEAF SPRING, Middle	2	
-79	37249	LEAF SPRING, Main	2	
-80	33746	WEAR PLATE, Ski	2	
	34917	SKI AND WEAR ROD ASSEMBLY	2	A
	37246	SKI AND WEAR ROD ASSEMBLY	2	B
-81	34919	WEAR ROD ASSEMBLY, Ski	2	
-82	9413314	LOCKNUT, 1/4-20	2	
-83	34918	SKI ASSEMBLY	2	A
	37247	SKI ASSEMBLY	2	B
-84	181620	SCREW, Hex HD, 5/16-24 by 2	2	
-85	120394	WASHER, Plain	4	
-86	9000124	LOCKNUT, 5/16-24	2	

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 4. Sheet 1 of 2

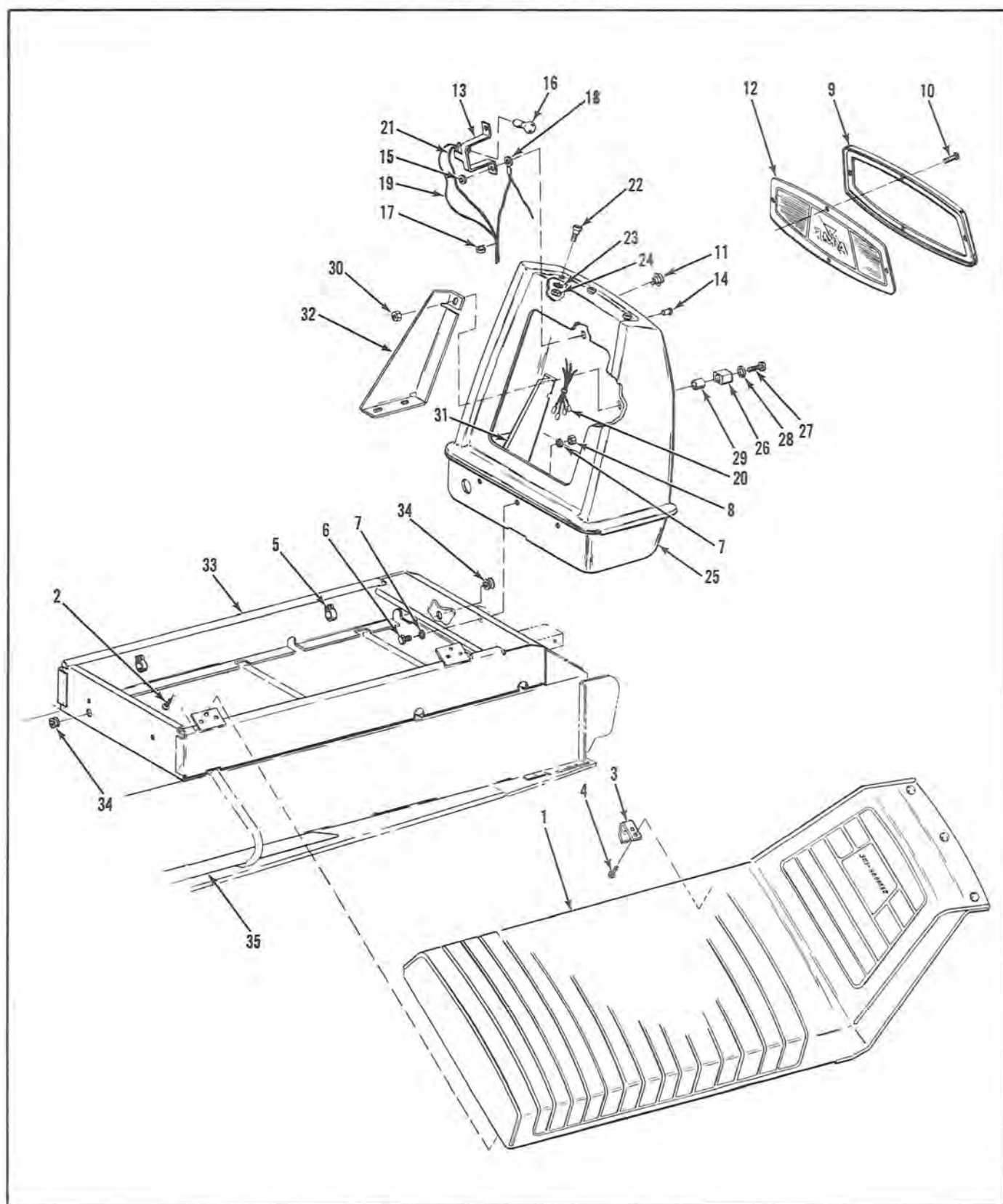


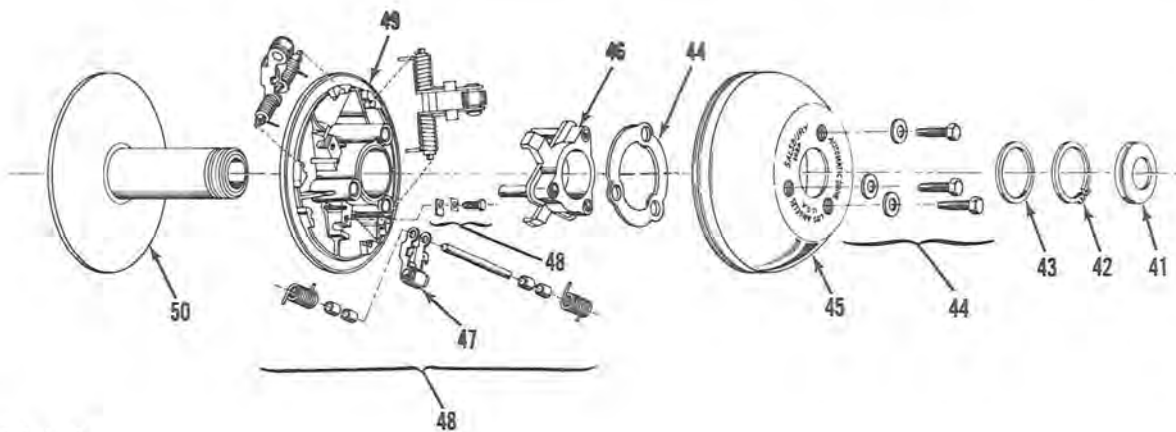
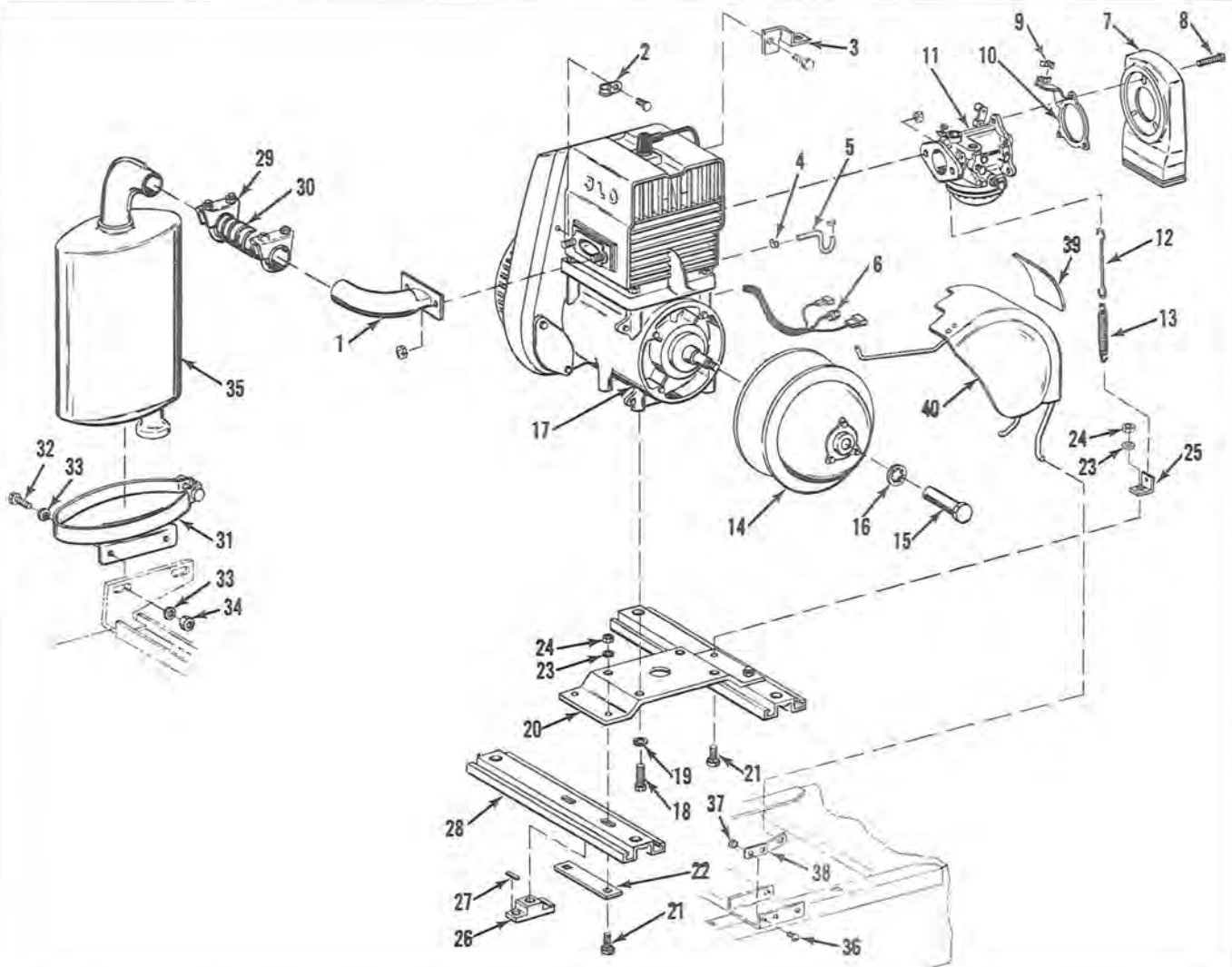
Figure 4. Sheet 2 of 2

Figure & Index Number	Part Number	Description	Qty	Model Code
4-	37809	REAR CONSOLE, SEAT AND TOOL BOX ASSEMBLY (See figure 1)	REF	A
	37764	REAR CONSOLE, SEAT AND TOOL BOX ASSEMBLY (See figure 1)	REF	B
-1	37165	SEAT	1	
-2	144815	SCREW, PAN HD, Self-tapping, 8 by 5/8	6	
-3	33611	LATCH, Spring	2	
-4	144815	SCREW, PAN HD, Self-tapping, 8 by 5/8	4	
-5	33610	CLIP, Wiring	2	
	37147	REAR CONSOLE ASSEMBLY	1	A
	37146	REAR CONSOLE ASSEMBLY	1	B
-6	181003	BOLT, Hex HD, 1/4-28 by 5/8	3	
-7	9416904	WASHER, Flat	6	
-8	9000123	LOCKNUT, 1/4-28	3	
-9	37257	COVER, Taillight lens	1	
-10	134179	SCREW, Machine oval HD, 6-32 by 3/4	4	
-11	9000551	NUT, Molly jack, 6-32	4	
-12	37156	LENS, Taillight	1	
-13	37155	BRACKET AND SOCKET ASSEMBLY	2	A
	37152	BRACKET AND SOCKET ASSEMBLY	2	B
-14	34024	RIVET	4	
-15	37651	RIVET BURR	2	
-16	33584	BULB, Taillight	2	A
	37078	BULB, Taillight	2	B
-17	37388	TIE, Cable	1	
-18	37278	WIRE, Taillight ground	1	
-19	37395	WIRE, Taillight	1	
-20	37392	WIRE, Taillight, left-turn signal	1	B
-21	37394	WIRE, Taillight, right-turn signal	1	B
-22	37373	STUD, Rear console, 8-32 by 5/8	3	
-23	37644	WASHER, Rear console	3	
-24	9000121	LOCKNUT, 8-32	3	
-25	37237	CONSOLE, Rear	1	
-26	37646	BUMPER, Kickstand	2	
-27	422420	SCREW, RD HD, 1/4-28 by 1-1/4	2	
-28	9414920	WASHER, Plain	2	
-29	37647	SPACER	2	
-30	9000123	LOCKNUT, 1/4-28	2	
-31	37157	BRACKET, Rear console, RH	1	
-32	37158	BRACKET, Rear console, LH	1	
-33	37210	TOOL BOX	1	A
	37205	TOOL BOX	1	B
-34	128157	GROMMET, Rubber	2	
-35	30228	FOOT PAD	2	

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 5. Sheet 1 of 2



DETAIL A

Figure 5. Sheet 2 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
5-	37120	ENGINE AND SUPPORT ASSEMBLY (See figure 1)	REF	A
-1	37181	PIPE, Engine exhaust	1	A
-2	2791	CLIP	1	A
-3	37598	BRACKET, Throttle	1	A
-4	30489	CLAMP, Hose	2	A
-5	30270	IMPULSE LINE, 3/16 by 5/16 by 7	1	A
-6	37225	WIRING CONNECTIONS, L295 engine	1	A
-7	33859	COVER, Air intake	1	A
-8	420998	SCREW, RD HD, 1/4-20 by 1-1/2	3	A
-9	1500932	CLIP, Cable	1	A
-10	37666	BRACKET, Choke control	1	A
-11	37258	CARBURETOR	1	A
-12	37402	HOOK, Spring	1	A
-13	37399	EXTENSION SPRING, Throttle	1	A
-14	37171	DRIVE CLUTCH ASSEMBLY (See detail A)	1	A
-15	33946	BOLT, Clutch adaptor	1	A
-16	125793	LOCKWASHER, 13/16	1	A
-17	37105	ENGINE, JLO 295	1	A
-18	180147	BOLT, Hex HD, 7/16-14 by 1-1/4	4	A
-19	120383	LOCKWASHER, 7/16	4	A
-20	37188	BASE, Engine	1	A
-21	9000323	BOLT, Carriage, 5/16-24 by 1	4	A
-22	37189	BAR WASHER	2	A
-23	120393	WASHER, Plain	4	A
-24	9000124	LOCKNUT, 5/16-24	4	A
-25	37400	RETAINER, Spring	1	A
-26	33768	SHOCKMOUNT	1	A
-27	37699	PAD, Shockmount	2	A
-28	37187	MOUNTING STRAP	2	A
-29	32588	CLAMP, Flexible tube	2	A
-30	37183	EXHAUST TUBE, Flexible	1	A
-31	34032	BAND ASSEMBLY, Mounting	1	A
-32	181595	SCREW, Hex HD, 5/16-24 by 3/4	2	A
-33	120393	WASHER, Plain, 11/32 by 11/16	4	A
-34	9000124	LOCKNUT, 5/16-24	2	A
-35	37173	MUFFLER	1	A
	37735	CLUTCH GUARD AND DECAL ASSEMBLY	1	A
	*1002400	CLUTCH GUARD KIT (Replaces items 36 through 40)	1	A
-36	132908	SCREW, RD HD, 10-32 by 1/2	2	A
-37	9000122	LOCKNUT, 10-32	2	A
-38	32511	SPRING PLATE, Clutch guard	1	A
-39	37353	DECAL, Safety	1	A
-40	38462	GUARD, Clutch	1	A
-41	37620	WASHER, Safety	1	A
-42	37619	RING, Retaining	1	A
-43	37617	SPACER	1	A
-44	37618	SCREW KIT (Consists of gasket, 3 washers and bolts)	1	A

*Replacement Kit

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 5. Sheet 3 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
5-45	37616	RAMP PLATE	1	A
-46	37615	SPIDER	1	A
-47	37624	ROLLER KIT	1	A
-48	37623	SPRING KIT	1	A
-49	37622	MOVABLE FACE	1	A
-50	37621	FIXED FACE	1	A

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 6. Sheet 1 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
6-	34927	ENGINE AND SUPPORT ASSEMBLY	REF	B
		(See figure 1)		
-1	37101	EXHAUST MANIFOLD, 5 degree	1	B
-2	37099	EXHAUST MANIFOLD, 45 degree	1	B
-3	30489	CLAMP, Hose	2	B
-4	30270	IMPULSE LINE, 3/16 by 5/16 7	1	B
-5	37131	WIRING CONNECTIONS, 493/2 engine	1	B
-6	1500932	CLIP, Cable	1	B
-7	37666	BRACKET, Choke control	1	B
-8	420991	SCREW, RD HD, 1/4-20 by 1/2	3	B
-9	37258	CARBURETOR	1	B
-10	37191	GASKET, Carburetor flange	1	B
-11	37190	BRACKET, Throttle	1	B
-12	37403	HOOK, Spring	1	B
-13	37399	EXTENSION SPRING, Throttle	1	B
-14	37130	DRIVE CLUTCH ASSEMBLY (See detail A)	1	B
-15	189348	BOLT, Hex HD, 1/2-20 by 5	1	B
-16	37383	CABLE, Battery to ground	1	B
-17	37054	STARTING MOTOR ASSEMBLY	1	B
-18	37079	ENGINE, Hirth 493	1	B
-19	180175	BOLT, Hex HD, 1/2-13 by 1-1/4	4	B
-20	120384	LOCKWASHER, 1/2	4	B
-21	37118	BASE, Engine	1	B
-22	9000323	BOLT, Carriage, 5/16-24 by 1	4	B
-23	37126	BAR WASHER	2	B
-24	120393	WASHER, Plain	4	B
-25	9000124	LOCKNUT, 5/16-24	4	B
-26	37401	RETAINER, Spring	1	B
-27	33768	SHOCKMOUNT	4	B
-28	37699	PAD, Shockmount	4	B
-29	37438	MOUNTING STRAP, Front	1	B
-30	34980	MOUNTING STRAP	1	B
-31	32588	CLAMP, Flexible tube	4	B
-32	37142	EXHAUST TUBE, Flexible, long	1	B
-33	37143	EXHAUST TUBE, Flexible, short	1	B
-34	34032	BAND ASSEMBLY, Mounting	1	B
-35	181595	SCREW, Hex HD, 5/16-24 by 3/4	2	B
-36	120393	WASHER, Plain, 11/32 by 11/16	4	B
-37	9000124	LOCKNUT, 5/16-24	2	B
-38	37095	MUFFLER	1	B
	33735	CLUTCH GUARD AND DECAL ASSEMBLY	1	B
	37215	CLUTCH GUARD ASSEMBLY	1	B
	*1002400	CLUTCH GUARD KIT	1	B
		(Replaces items 39 through 42A)		
-39	132908	SCREW, RD HD, 10-32 by 1/2	2	B
-40	9000122	LOCKNUT, 10-32	2	B
-41	32511	SPRING PLATE, Clutch guard	1	B
-42	38462	GUARD, Clutch	1	B
-42A	37353	DECAL, Safety	1	B
-43	37944	LOCK PLATE	1	B

*Replacement Kit

A - MK IV (SD15P10A)
 B - MK V (SD18E20A)

Figure 6. Sheet 2 of 3

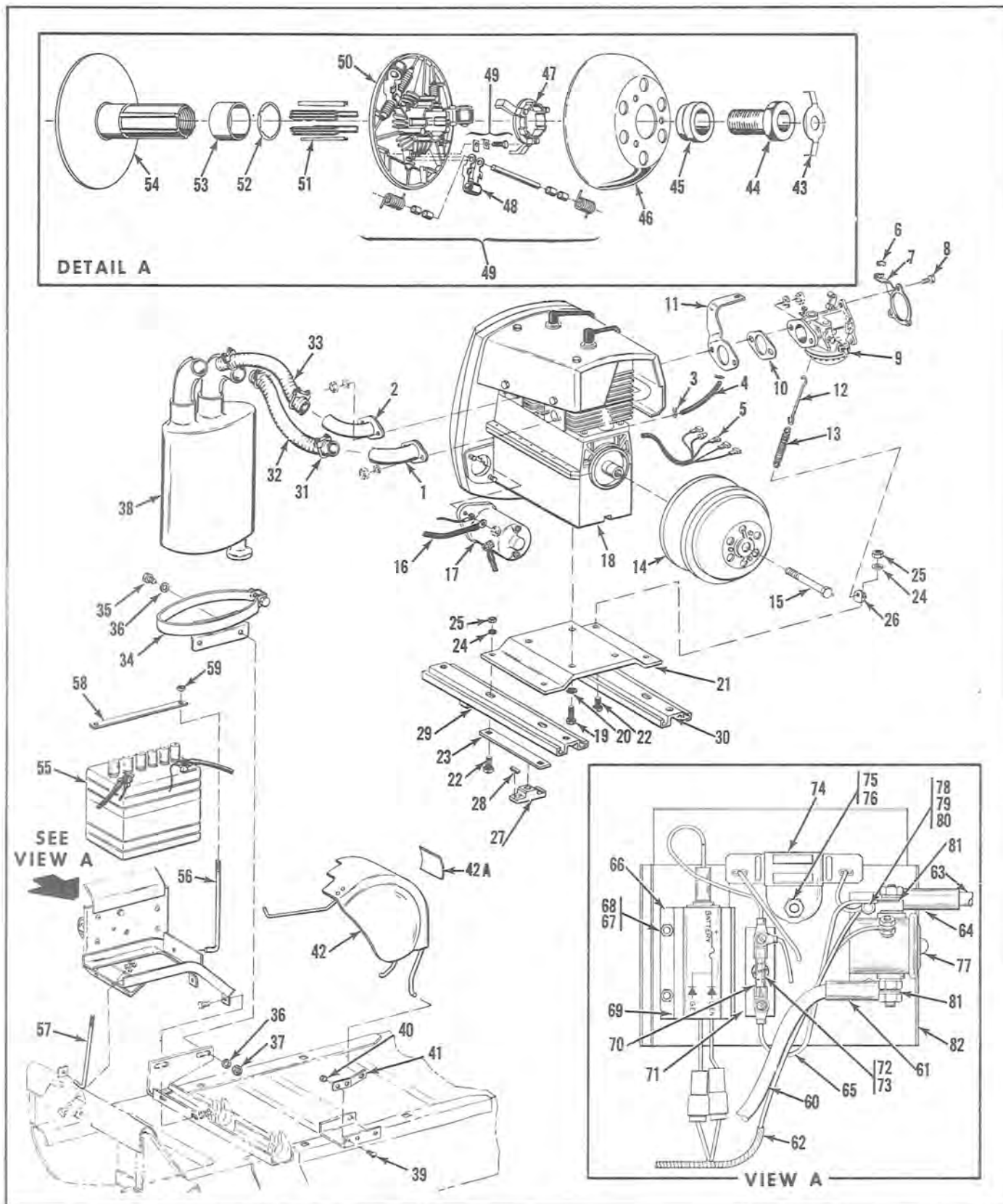


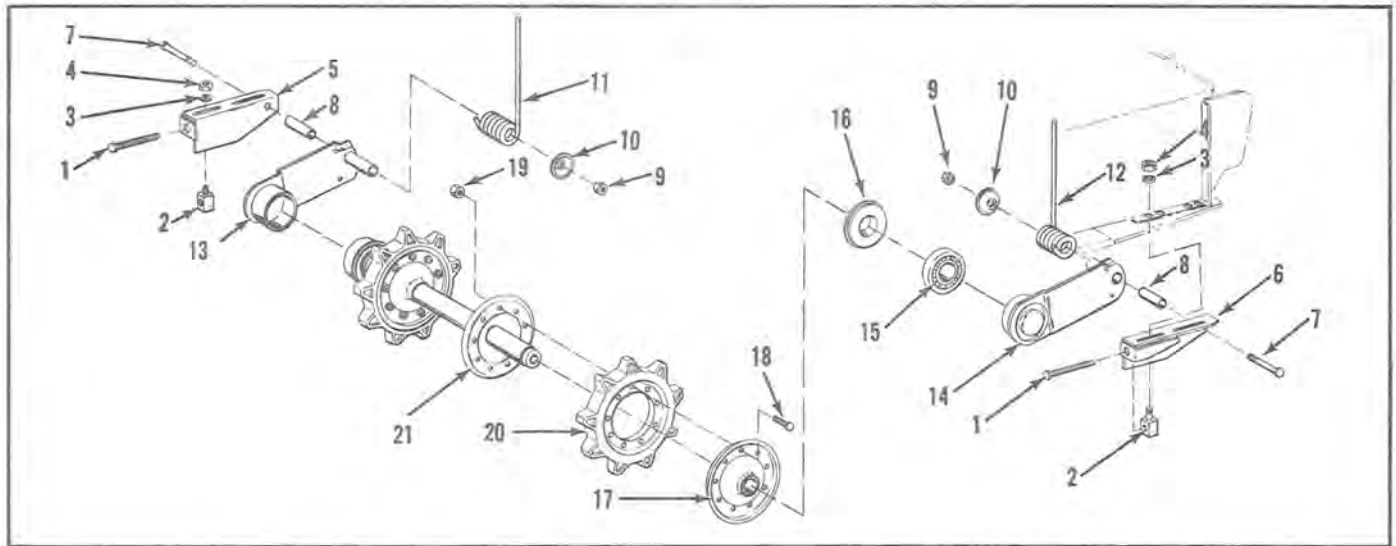
Figure 6. Sheet 3 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
6-44	37936	NUT	1	B
-45	37720	RETAINING WASHER	1	B
-46	37719	RAMP PLATE	1	B
-47	37718	SPIDER	1	B
-48	37717	ROLLER ARM ASSEMBLY, Kit	1	B
-49	37631	SPRING KIT	1	B
-50	37716	MOVABLE FACE ASSEMBLY	1	B
-51	37715	LINER, Spline	6	B
-52	37714	WASHER, Idler bearing	1	B
-53	37713	BEARING, Idler	1	B
-54	37712	FIXED FACE ASSEMBLY	1	B
-55	33979	STORAGE BATTERY	1	B
-56	37064	BATTERY HOLDDOWN ROD, Long	1	B
-57	37065	BATTERY HOLDDOWN ROD, Short	1	B
-58	37062	BATTERY HOLDDOWN STRAP	1	B
-59	9000123	LOCKNUT, 1/4-28	2	B
	37765	BATTERY SUPPORT AND ELECTRICAL	REF	B
		ASSEMBLY (See figure 1)		
-60	34015	CABLE ASSEMBLY, To starter	1	B
-61	37410	TUBING	1	B
-62	37071	SLED HARNESS	1	B
	37094	ELECTRICAL PANEL ASSEMBLY	1	B
-63	34014	CABLE ASSEMBLY, Battery to solenoid	1	B
-64	37410	TUBING	1	B
-65	37387	JUMPER LEAD	1	B
-66	37385	RECTIFIER ASSEMBLY	1	B
-67	436695	SCREW, PAN HD, 8-32 by 1/2	2	B
-68	9000121	LOCKNUT, 8-32	2	B
-69	37386	HEAT SHIELD, Rectifier	1	B
-70	37382	FUSE, 15 amp	1	B
-71	37381	FUSE HOLDER	1	B
-72	133427	SCREW, Flat HD, 6-32 by 7/16	1	B
-73	9000126	LOCKNUT, 6-32	1	B
-74	37377	RESISTOR, Fixed	1	B
-75	181003	BOLT, Hex HD, 1/4-28 by 5/8	1	B
-76	9000123	LOCKNUT, 1/4-28	1	B
-77	34029	SOLENOID, Electric start	1	B
-78	436750	SCREW, PAN HD, 10-32 by 1/2	2	B
-79	121801	LOCKWASHER, Internal tooth, No. 10	1	B
-80	9000122	LOCKNUT, 10-32	2	B
-81	138538	LOCKWASHER, Internal tooth, 5/16	2	B
-82	37058	BATTERY SUPPORT, Weldment	1	B

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 7

Figure
& Index
Number

Part Number

Description

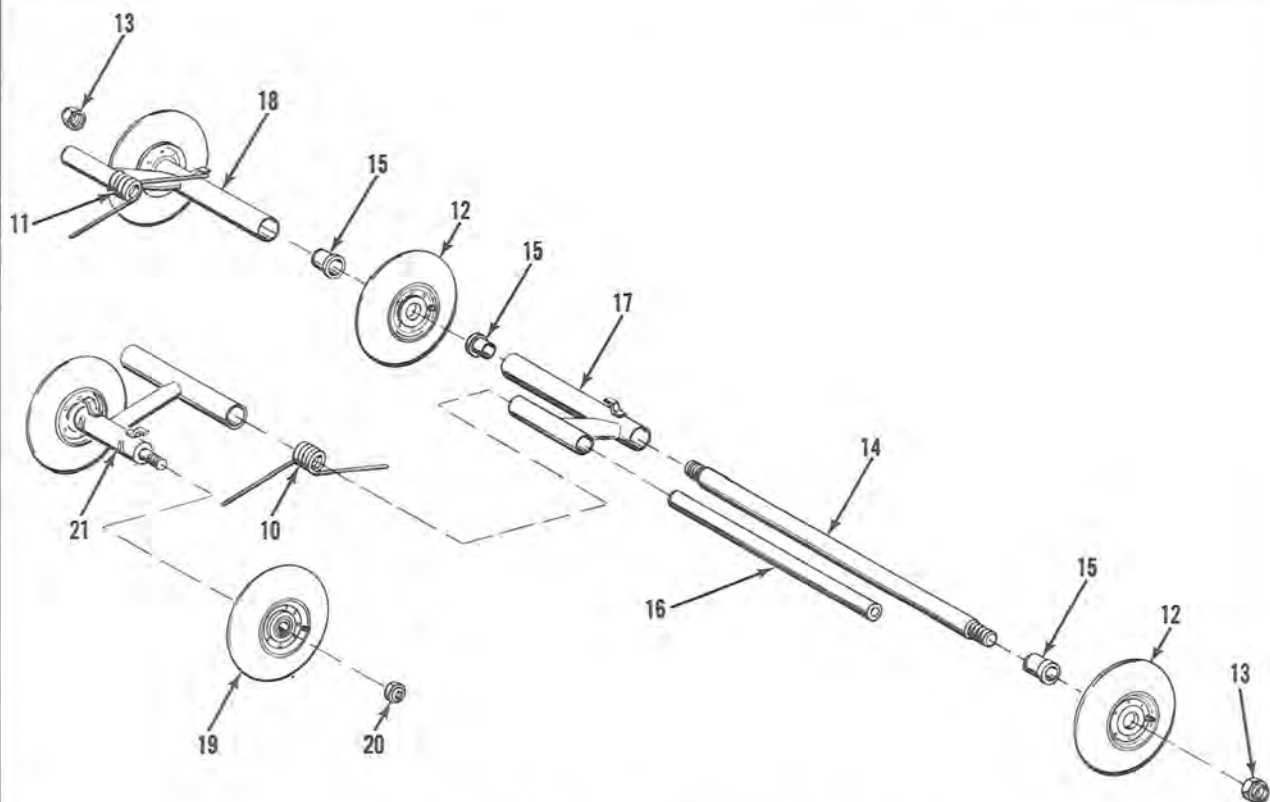
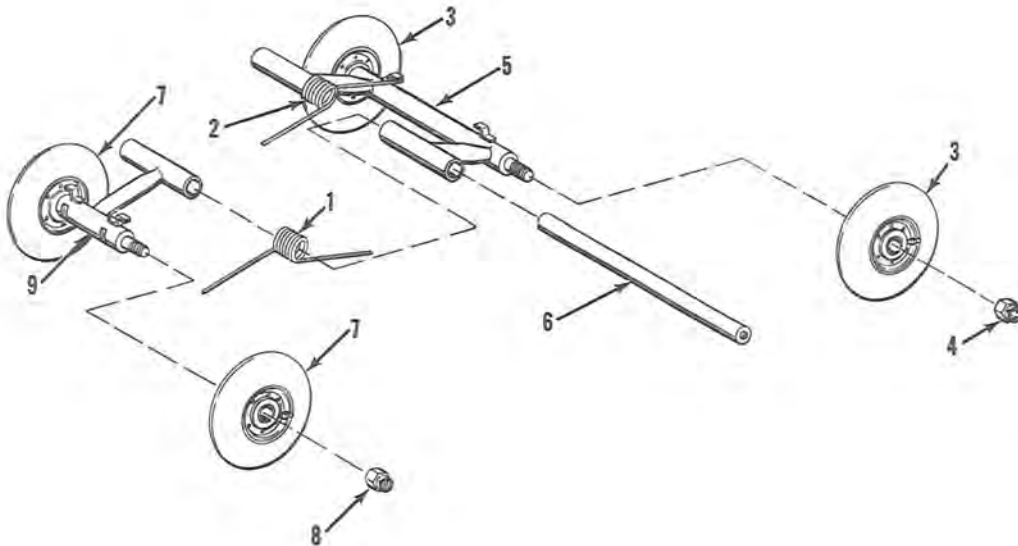
Qty

Model Code

7-	37203	TRACTION BELT TAKE-UP ASSEMBLY	REF	A
		(See figure 1)			
	34924	TRACTION BELT TAKE-UP ASSEMBLY	REF	B
		(See figure 1)			
-1	32266	SCREW, Adjusting	2		
-2	32265	BLOCK, Adjusting	2		
-3	456145	WASHER, Flat, 5/16	2		
-4	9000124	LOCKNUT, 5/16-24	2		
-5	34683	ANGLE, Belt adjustment, RH	1		
-6	34684	ANGLE, Belt adjustment, LH	1		
-7	181651	SCREW, Hex HD, 3/8-24 by 2-3/4	2		
-8	33705	SPACER, Rear support arm	2		
-9	9000125	LOCKNUT, 3/8-24	2		
-10	32237	RETAINER	2		
-11	33356	SPRING, Rear torsion, RH	1		
-12	33357	SPRING, Rear torsion, LH	1		
-13	706	GREASE FITTING	2		
-14	33346	REAR SUPPORT ARM ASSEMBLY, RH	1		
-15	33347	REAR SUPPORT ARM ASSEMBLY, LH	1		
	37199	REAR SUPPORT ASSEMBLY	1		A
	37196	REAR SUPPORT ASSEMBLY	1		B
-16	33417	BEARING	2		
-17	37197	CUPPED PLUG, Rear shaft	2		
-18	30079	GREASE SEAL	2		
-19	37192	SPROCKET SUPPORT PLATE ASSEMBLY	2		
-20	181566	SCREW, Hex HD, 1/4-28 by 3/4	18		
-21	9000123	LOCKNUT, 1/4-28	18		
-22	37144	SPROCKET, Idler	2		
-23	37200	REAR SHAFT AND SPROCKET PLATE	1		A
		ASSEMBLY			
	37198	REAR SHAFT AND SPROCKET PLATE	1		B
		ASSEMBLY			

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 8. Sheet 1 of 2



FRONT BOGIE ASSEMBLY- MARK V only

Figure 8. Sheet 2 of 2

Figure & Index Number	Part Number	Description	Qty	Model Code
8-	37083	BOGIE ASSEMBLY (See figure 1)	REF	A
	34901	BOGIE ASSEMBLY, Middle and rear	REF	B
		(See figure 1)		
-1	33712	TORSION SPRING, Bogie, RH	3	A
	33712	TORSION SPRING, Bogie, RH	2	B
-2	33711	TORSION SPRING, Bogie, LH	3	A
	33711	TORSION SPRING, Bogie, LH	2	B
	37085	BOGIE WHEEL AND SUPPORT	3	A
		ASSEMBLY - HALF		
	34902	BOGIE WHEEL AND SUPPORT	2	B
		ASSEMBLY - HALF		
-3	33713	WHEEL, Bogie	6	A
	33713	WHEEL, Bogie	4	B
-4	9000393	LOCKNUT, 5/8-18	6	A
	9000393	LOCKNUT, 5/8-18	4	B
-5	37086	BOGIE SUPPORT ASSEMBLY - HALF	3	A
	34907	BOGIE SUPPORT ASSEMBLY - HALF	2	B
-6	37084	SUPPORT SHAFT, Bogie wheel	3	A
	33754	SUPPORT SHAFT, Bogie wheel	2	B
	37088	BOGIE WHEEL AND SUPPORT	3	A
		ASSEMBLY - HALF		
	34903	BOGIE WHEEL AND SUPPORT	2	B
		ASSEMBLY - HALF		
-7	33713	WHEEL, Bogie	6	A
	33713	WHEEL, Bogie	4	B
-8	9000393	LOCKNUT, 5/8-18	6	A
	9000393	LOCKNUT, 5/8-18	4	B
-9	37089	SUPPORT ASSEMBLY, Bogie	3	A
	34908	SUPPORT ASSEMBLY, Bogie	2	B
	34904	BOGIE ASSEMBLY, Front (See figure 1)	REF	B
-10	33712	TORSION SPRING, Bogie, RH	1	B
-11	33711	TORSION SPRING, Bogie, LH	1	B
-12	33713	WHEEL, Bogie	3	B
-13	9000393	LOCKNUT, 5/8-18	2	B
-14	33909	SHAFT, Bogie axle	1	B
-15	33907	BUSHING, Bogie	4	B
-16	33754	SUPPORT SHAFT, Bogie wheel	1	B
-17	34906	SUPPORT ASSEMBLY, Bogie, RH	1	B
-18	34905	SUPPORT ASSEMBLY, Bogie, LH	1	B
	34903	BOGIE WHEEL AND SUPPORT	1	B
		ASSEMBLY - HALF		
-19	33713	WHEEL, Bogie	2	B
-20	9000393	LOCKNUT, 5/8-18	2	B
-21	34908	SUPPORT ASSEMBLY, Bogie	1	B

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 9. Sheet 1 of 3

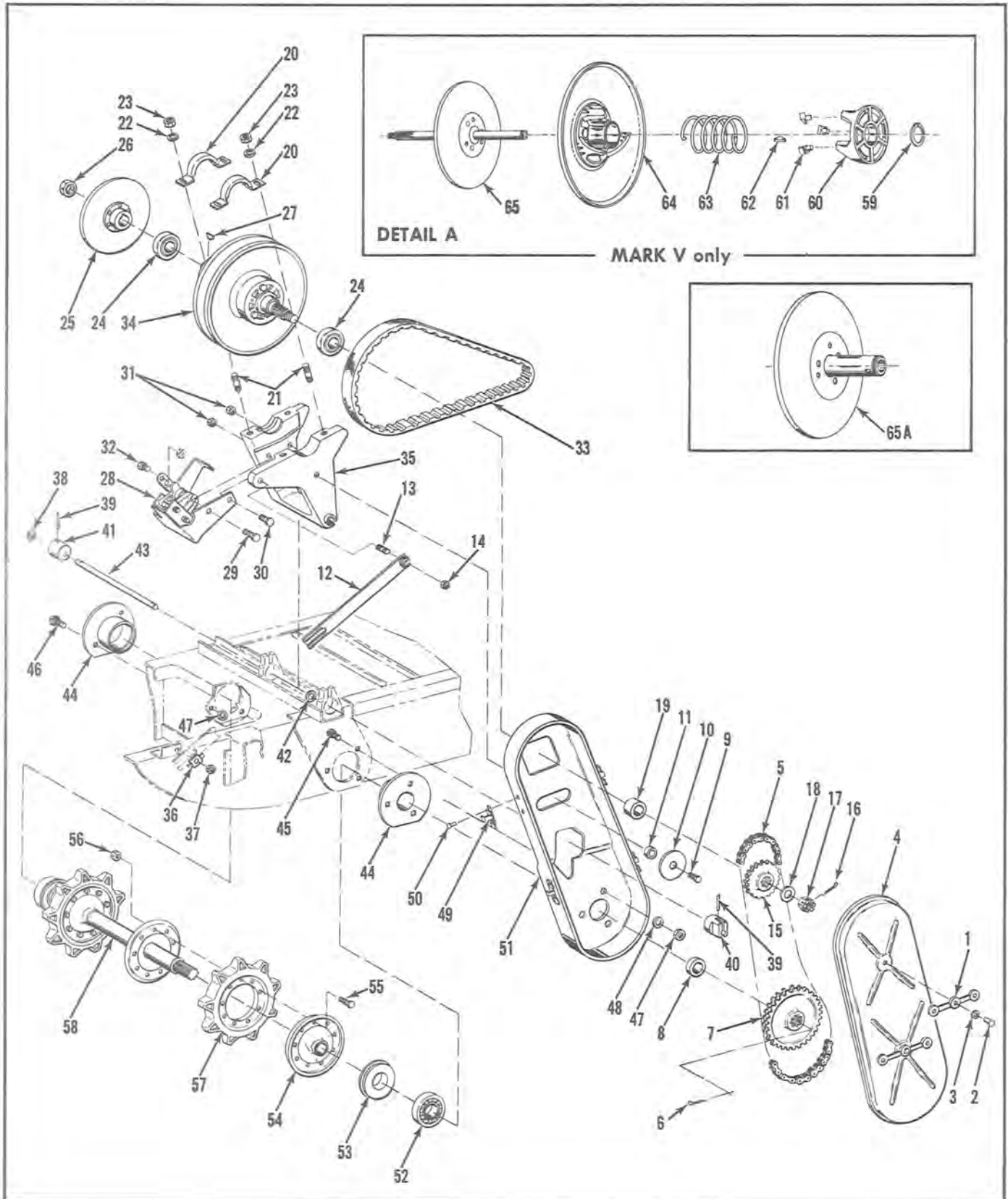


Figure 9. Sheet 2 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
9-	37290	CHAIN COVER TOP ASSEMBLY	1	
-1	37292	STRAP, Chain cover	2	
-2	37420	RIVET	2	
-3	446152	WASHER, Plain, 13/64 by 15/32	4	
-4	37291	CHAIN COVER, Top	1	
-5	37140	ROLLER CHAIN, 35-2, 100 pitch	1	
-6	137258	COTTER PIN, 3/16 by 1-3/4	1	
-7	35042	SPROCKET, 35-2, 45 teeth	1	A
	35041	SPROCKET, 35-2, 44 teeth	1	B
-8	34629	SPACER	1	
-9	180078	BOLT, Hex HD, 5/16-18 by 7/8	1	
-10	37440	WASHER, Chain cover	1	
-11	37439	SPACER, Chain cover	1	
	37115	DRIVEN CLUTCH AND MOUNTING	REF	A
		ASSEMBLY (See figure 1)		
	34928	DRIVEN CLUTCH AND MOUNTING	REF	B
		ASSEMBLY (See figure 1)		
-12	37254	ROD TENSIONER, Clutch	1	
-13	272726	STUD, 3/8-24 by 1-1/2	1	
-14	9000125	LOCKNUT, 3/8-24	1	
-15	34277	SPROCKET, 35-2, 19 teeth	1	A
	34304	SPROCKET, 35-2, 21 teeth	1	B
-16	119120	COTTER PIN, 3/32 by 1-1/4	1	
-17	125250	NUT, Slotted, 1/2-20	1	
-18	9417098	WASHER, Flat, 17/32 by 1	1	
-19	34628	SPACER	1	
-20	34636	CLAMP, Bearing	2	
-21	147664	STUD	4	
-22	120393	WASHER, 11/32 by 11/16	4	
-23	9000124	LOCKNUT, 5/16-24	4	
-24	34645	BEARING, Driven clutch	2	
-25	28784	HUB AND DISC ASSEMBLY	1	
-26	272686	LOCKNUT, 3/4-16	1	
-27	106751	KEY, Woodruff, No. 9, 3/16 by 3/4	1	
-28	37378	DISC BRAKE ASSEMBLY	1	A
	37469	DISC BRAKE ASSEMBLY	1	B
-29	181610	BOLT, Hex HD, 5/16-24 by 1-1/4	1	
-30	181608	BOLT, Hex HD, 5/16-24 by 1	1	
-31	9000124	LOCKNUT, 5/16-24	2	
-32	120854	BOLT, Hex HD, 1/4-20 by 5/8	1	
-33	37172	BELT, Variable speed	1	A
	34914	BELT, Variable speed	1	B
-34	37170	DRIVEN CLUTCH AND SHAFT (See detail A) ...	1	A
	34968	DRIVEN CLUTCH AND SHAFT (See detail A) ...	1	B
-35	34925	DRIVEN CLUTCH MOUNTING	1	
-36	37253	WASHER, Serrated	1	
-37	9000124	LOCKNUT, 5/16-24	1	
-38	34826	RING, Retaining	1	
-39	273938	PIN, Spring	2	
-40	34950	CAM, Right side	1	
-41	34952	CAM, Left side	1	
-42	9417098	WASHER, Plain, 17/32 by 1	1	

A - MK IV (SD15P10A)

B - MK V (SD18E20A)

Figure 9. Sheet 3 of 3

Figure & Index Number	Part Number	Description	Qty	Model Code
9-43	34965	SHAFT, Clutch mounting	1	
-44	37024	BEARING RETAINER AND PLATE ASSY	2	
-45	9000326	BOLT, Carriage, 5/16-24 by 7/8	3	
-46	9000321	BOLT, Carriage, 5/16-24 by 5/8	3	
-47	9000124	LOCKNUT, 5/16-24	6	
-48	37294	BUSHING, Chain cover	3	
	37287	CHAIN COVER BOTTOM ASSEMBLY	1	
-49	37289	BRACKET, Chain cover	4	
-50	37251	RIVET	8	
-51	37288	CHAIN COVER, Bottom	1	
	37113	DRIVE SPROCKET ASSEMBLY (See figure 1) ..	REF	A
	34929	DRIVE SPROCKET ASSEMBLY (See figure 1) ..	REF	B
-52	34648	BEARING, 25 MM bore	2	
-53	30079	SEAL, Grease	2	
-54	37192	SPROCKET SUPPORT PLATE ASSEMBLY	2	
-55	181566	SCREW, 1/4-28 by 3/4	18	
-56	9000123	LOCKNUT, 1/4-28	18	
-57	33659	SPROCKET, Drive	2	
-58	37114	DRIVE SHAFT AND PLATE ASSEMBLY	1	A
	34931	DRIVE SHAFT AND PLATE ASSEMBLY	1	B
-59	37610	RING, Retaining	1	
-60	37609	TORQUE BRACKET	1	A
	37724	TORQUE BRACKET ASSY (Includes item No. 61)	1	B
-61	37604	BUTTON, Shoe ramp	3	
-62	37603	KEY	1	
-63	37602	SPRING	1	
-64	37608	MOVABLE FACE	1	A
	37933	MOVABLE FACE	1	B
-65	37607	FIXED FACE	1	A
-65A	37722	FIXED FACE AND HUB ASSEMBLY	1	B

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

Figure 10

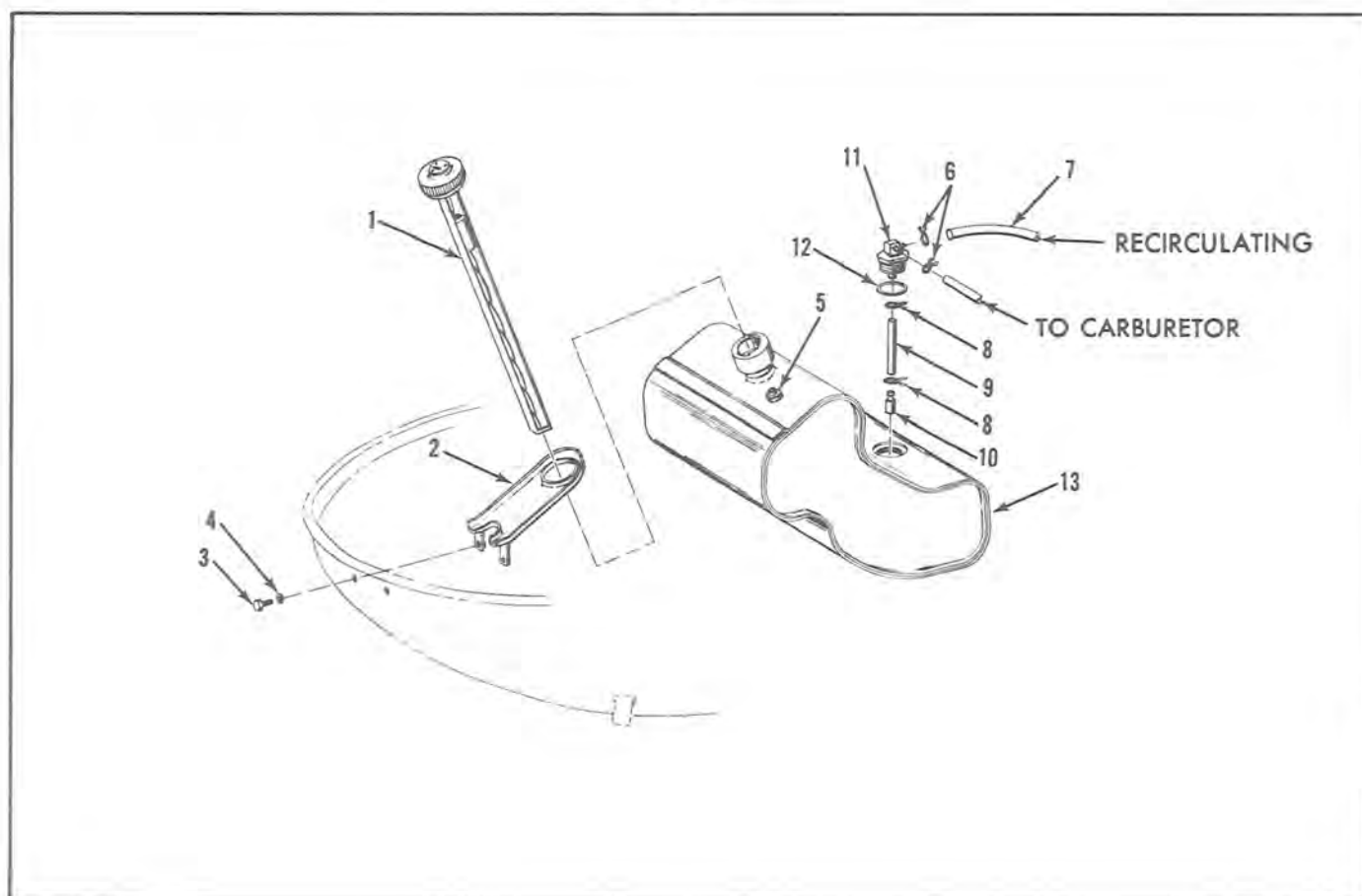


Figure & Index Number	Part Number	Description	Qty	Model Code
10-1	37266	GAS CAP AND INDICATOR ASSEMBLY (See figure 1)	REF	A
	37683	GAS CAP ASSEMBLY (See figure 1)	REF	B
-2	37274	SPILL CHUTE, Gas	1	A
	37357	SPILL CHUTE, Gas	1	B
-3	181561	BOLT, Hex HD, 1/4-24 by 1/2	2	
-4	147579	WASHER, Plain	2	
-5	37273	RELIEF VALVE	1	
-6	30489	CLAMP, Hose	4	
-7	37454	GAS LINE	2	A
	37268	GAS LINE	2	B
	37277	GAS LINE ASSEMBLY, Tank	1	
-8	30489	CLAMP, Hose	2	
-9	37267	GAS LINE, Gas tank	1	
-10	37270	FILTER, Fuel tank	1	
-11	37271	GAS OUTLET, Gas tank	1	
-12	34154	GASKET, Gas tank outlet	1	
-13	37264	GAS TANK	1	A
	37259	GAS TANK	1	B

A - MK IV (SD15P10A)
B - MK V (SD18E20A)

NUMERICAL INDEX

Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty
1002400	5-	1	1500480	3-43	2	30079	7-18	2
	6-	1	1500932	5-9	1		9-53	2
106751	9-27	1		6-6	1	30081	3-9	4
119120	9-16	1	180078	9-9	1	30149	3-62	2
120382	1-74	2	180147	5-18	4	30228	4-35	2
120383	5-19	4	180175	6-19	4	30251	3-4	2
120384	6-20	4	181003	1-59	2	30270	5-5	1
120392	1-35	1		4-6	3		6-4	1
	1-53	3		6-75	1	30489	5-4	2
	1-60	4	181561	7-7	2		6-3	2
120393	5-23	4		10-3	2		10-6	4
	5-33	4	181566	1-58	2		10-8	2
	6-24	4		7-20	18	32185	3-19	2
	6-36	4		9-55	18	32234	1-17	2
	9-22	4	181573	1-12	4	32237	7-10	2
120394	3-85	4	181575	1-24	2	32265	7-2	2
120612	3-51	2	181576	3-33	2	32266	7-1	2
120854	9-32	1	181578	1-18	4	32286	3-22	2
121801	6-79	1	181579	3-12	2	32511	5-38	1
124595	3-10	4	181581	1-34	1		6-41	1
124818	2-18	4	181595	1-69	6	32532	1-41	4
125250	9-17	1		5-32	2	32588	5-29	2
125680	2-37	7		6-35	2		6-31	4
125793	5-16	1	181608	9-30	1	33320	3-1	2
128157	4-34	2	181610	9-29	1	33346	7-14	1
132908	2-4	2	181620	3-84	2	33347	7-15	1
	5-36	2	181639	3-73	4	33356	7-11	1
	6-39	2	181641	3-6	2	33357	7-12	1
133427	6-72	1	181643	1-73	2	33417	7-16	2
134179	4-10	4	181650	3-2	2	33584	4-16	2
137258	3-59	2	187044	3-66	2	33595	1-44	3
	9-6	1	189348	6-15	1	33610	2-17	3
138485	1-70	6	21777	3-3	4		4-5	2
138538	6-81	2		3-7	4	33611	4-3	2
144518	3-69	4	272686	9-26	1	33647	2-19	2
144815	4-2	6	272726	9-13	1	33659	9-59	2
	4-4	4	273407	2-25	4	33705	7-8	2
147579	3-13	4	273938	9-39	2	33711	8-2	3
	3-28	4	274517	3-74	4		8-2	2
	3-34	2	274865	1-32	4		8-11	1
	10-4	2	2791	5-2	1	33712	8-1	3
147664	9-21	4	28762	3-71	2		8-1	2
1500477	3-46	1	28784	9-26	1		8-10	1

Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty
33713	6-53	1	34648	9-52	2	34985	1-1	1
	8-3	6	34683	7-5	1		2-	REF
	8-3	4	34684	7-6	1	34986	2-43	1
	8-7	6	34688	3-14	1	34989	2-44	2
	8-7	4	34689	3-16	1	34991	2-11	1
	8-12	3	34694	3-15	1	34992	2-39	2
	8-19	2	34826	9-38	1	34993	3-31	1
33717	6-48	1	34900	1-	1	34996	3-44	1
33730	3-78	2	34901	1-67	2	34997	3-44	1
33731	3-77	2		8-	REF	34998	3-47	1
33732	3-72	2	34902	8-	2	35000	1-3	1
33735	6-	1		8-	1		2-50	REF
33746	3-80	2	34903	8-	2	35001	1-3	1
33748	3-70	2	34904	1-68	1		2-51	REF
33753	3-63	2		8-	REF	35005	2-46	6
33754	8-6	2	34905	8-18	1	35011	2-41	2
	8-16	1	34906	8-17	1	35016	1-1	1
33756	3-64	2	34907	8-5	2		2-	REF
33764	1-28	1	34908	8-9	2	35017	2-43	1
33768	1-46	4		8-21	1	35021	2-	1
	5-26	1	34914	9-33	1	35022	2-32	1
	6-27	4	34916	1-10	2	35023	2-27	1
33769	1-43	4		3-	REF	35024	2-28	1
33778	1-20	2	34917	3-	2	35027	2-23	1
33808	1-6	4	34918	3-83	2	35028	2-24	1
	1-14	4	34919	3-81	2	35029	2-26	2
	1-21	4	34920	3-	2	35041	9-7	1
	1-25	2	34924	1-62	1	35042	9-7	1
	3-35	2		7-	REF	35044	3-48	1
33859	5-7	1	34925	9-35	1	37000	2-	1
33907	8-15	4	34927	1-39	1	37001	2-	1
33909	8-14	1		6-	REF	37002	2-15	1
33946	5-15	1	34928	1-72	1	37003	2-13	1
33979	6-55	1		9-	REF	37005	2-7	1
34014	6-63	1	34929	1-75	1	37006	2-	1
34015	6-60	1		9-	REF	37007	2-10	1
34024	4-14	4	34931	9-58	1	37008	2-9	1
34029	6-77	1	34932	1-77	1	37009	2-	1
34032	5-31	1	34942	3-	2	37013	1-77	1
34058	2-20	4	34943	3-11	2	37024	9-44	2
34154	10-12	1	34945	3-61	1	37029	1-2	1
34271	2-2	3	34946	3-23	1	37030	1-2	1
	2-14	4	34950	9-40	1	37031	2-35	1
	2-42	4	34952	9-41	1	37032	2-36	1
	2-45	4	34960	1-71	1	37033	2-35	1
	3-38	4	34965	9-43	1	37034	2-36	1
34277	9-15	1	34968	9-34	1	37035	3-	1
34304	9-15	1	34969	3-76	2	37036	3-37	2
34628	9-19	1	34976	3-	2	37037	3-50	1
34629	9-8	1	34980	6-30	1	37038	3-53	1
34636	9-20	2	34983	2-48	6	37039	3-53	1
34645	9-24	2	34984	2-1	1	37040	3-	2

Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty
37041	3-	2	37131	6-5	1	37225	5-6	1
37042	3-11	2	37133	3-32	1	37226	3-68	2
37045	2-3	1	37135	3-39	2	37230	3-45	1
37050	1-	1	37136	3-	1	37231	3-18	2
37051	2-16	2	37137	3-26	1	37237	4-25	1
37052	2-	1	37140	9-5	1	37245	1-10	2
37054	6-17	1	37142	6-32	1	3-	REF	
37055	2-21	1	37143	6-33	1	37246	3-	2
37057	2-30	1	37144	7-22	2	37247	3-83	2
37058	6-82	1	37145	1-71	1	37249	3-79	2
37062	6-58	1	37146	4-	1	37251	9-50	8
37064	6-56	1	37147	4-	1	37253	9-36	1
37065	6-57	1	37149	3-21	1	37254	9-12	1
37067	3-	1	37152	4-13	2	37257	4-9	1
37069	2-29	1	37155	4-13	2	37258	5-11	1
37071	6-62	1	37156	4-12	1	6-9	1	
37072	3-40	1	37157	4-31	1	37259	10-13	1
37075	3-41	1	37158	4-32	1	37264	10-13	1
37076	3-42	1	37159	3-20	1	37266	1-76	1
37077	3-58	1	37165	4-1	1	10-1	REF	
37078	4-16	2	37166	3-	1	37267	10-9	1
37079	6-18	1	37167	3-24	1	37268	10-7	2
37080	1-3	1	37168	3-25	1	37270	10-10	1
	2-50	REF	37169	3-30	1	37271	10-11	1
37081	1-3	1	37170	9-34	1	37273	10-5	1
	2-51	REF	37171	5-14	1	37274	10-2	1
37083	1-66	3	37172	9-33	1	37277	10-	1
	8-	REF	37173	5-35	1	37284	2-34	1
37084	8-6	3	37175	1-23	1	37285	3-49	1
37085	8-	3	37176	1-23	1	37286	3-49	1
37086	8-5	3	37181	5-1	1	37287	9-	1
37088	8-	3	37183	5-30	1	37288	4-18	1
37089	8-9	3	37184	1-11	2		9-51	1
37094	6-	1	37186	1-19	2	37289	9-49	4
37095	6-38	1	37187	5-28	2	37290	9-	1
37099	6-2	1	37188	5-20	1	37291	9-4	1
37101	6-1	1	37189	5-22	2	37292	9-1	2
37105	5-17	1	37190	6-11	1	37294	9-48	3
37108	2-29	1	37191	6-10	1	37344	1-55	1
37111	2-30	1	37192	7-19	2	37345	1-56	1
37113	1-75	1		9-54	2	37351	1-33	1
	9-	REF	37196	7-	1	37353	5-39	1
37114	9-58	1	37197	7-17	2		6-42A	1
37115	1-72	1	37198	7-23	1	37357	10-2	1
	9-	REF	37199	7-	1	37373	4-22	3
37118	6-21	1	37200	7-23	1	37374	3-37	2
37120	1-39	1	37203	1-62	1	37377	6-74	1
	5-	REF		7-	REF	37378	9-28	1
37122	1-37	1	37205	4-33	1	37381	6-71	1
37124	3-60	2	37210	4-33	1	37382	6-70	1
37126	6-23	2	37215	6-	1	37383	6-16	1
37130	6-14	1	37222	3-65	2	37385	6-66	1

Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty
37386	6-69	1	37650	1-4	1	456145	1-64	2
37387	6-65	1		3-	REF		7-3	2
37388	4-17	1	37651	4-15	2	706	7-13	2
37392	4-20	1	37666	5-10	1	9000121	4-24	3
37394	4-21	1		6-7	1		6-68	2
37395	4-19	1	37683	1-76	1	9000122	2-5	2
37399	5-13	1		10-1	REF		2-6	2
	6-13	1	37698	1-47	1		3-52	2
37400	5-25	1	37699	5-27	2		3-57	1
37401	6-26	1		6-28	4		5-37	2
37402	5-12	1	37707	1-4	1		6-40	2
37403	6-12	1		3-	REF		6-80	2
37410	6-61	1	37709	2-34	1	9000123	1-7	4
	6-64	1	37712	6-54	1		1-9	2
37411	3-	2	37714	6-52	1		1-16	4
37412	3-72	2	37715	6-51	6		1-22	4
37420	9-2	2	37716	6-50	1		1-27	2
37432	3-54	1	37718	6-47	1		1-29	6
37438	6-29	1	37719	6-46	1		1-36	1
37439	9-11	1	37720	6-45	1		1-54	3
37440	9-10	1	37722	9-65A	1		1-61	4
37448	3-26	1	37735	5-	1		2-47	6
37451	3-	1	37764	1-28	1		3-17	2
37454	10-7	2		4-	REF		3-29	4
37469	9-28	1	37765	1-57	1		3-36	2
37471	2-33	1		6-	REF		4-8	3
37582	1-47	1	37778	1-78	1		4-30	2
37583	1-49	1	37801	1-48	2		6-59	2
37584	1-50	1		1-48	1		6-76	1
37591	2-49	1	37809	1-28	1		7-21	18
37598	5-3	1		4-	REF		9-56	18
37602	9-63	1	37933	9-64	1	9000124	1-31	4
37603	9-62	1	37936	6-44	1		1-65	2
37604	9-61	3	37944	6-43	1		3-86	2
37607	9-65	1	38462	5-40	1		5-24	4
37608	9-64	1		6-42	1		5-34	2
37609	9-60	1	420991	6-8	3		6-25	4
37610	9-59	1	420998	5-8	3		6-37	2
37615	5-46	1	422420	4-27	2		7-4	2
37616	5-45	1	424250	2-8	2		9-23	4
37617	5-43	1	436576	3-55	1		9-31	2
37618	5-44	1	436695	6-67	2		9-37	1
37619	5-42	1	436750	6-78	2		9-47	6
37620	5-41	1	437028	2-22	2	9000125	1-45	4
37621	5-50	1	445170	2-12	4		3-5	2
37622	5-49	1		2-40	6		3-8	2
37623	5-48	1	446143	3-56	1		3-67	2
37626	5-47	1	446152	9-3	4		3-75	4
37631	6-49	1	446188	1-15	4		7-9	2
37644	4-23	3		1-26	4		9-14	1
37646	4-26	2		1-30	6	9000126	6-73	1
37647	4-29	2	447811	1-38	2	9000302	1-8	2

Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty	Part No.	Figure & Index Number	Qty
9000302 (Cont)	1-52	3	9000393	8-4	6	9000551	4-11	4
	3-27	4		8-4	4	9000911	1-51	2
9000305	1-5	4		8-8	6	9413314	3-82	2
9000321	9-46	3		8-8	4	9414920	4-28	2
9000322	1-63	2		8-13	2	9416904	1-13	4
9000323	5-21	4		8-20	2		4-7	6
	6-22	4	9000461	2-31	2	9417098	9-18	1
9000324	1-40	4	9000462	2-38	7		9-42	1
9000326	9-45	3						

